Annual Report on Loyetea EL12/2014

For:- Edrill Pty. Ltd.

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Summary

This first Annual Report for Loyetea (EL12/2014) details drilling and ground magnetic exploration activities for the period 29/7/2014 to 29/7/2015.

Drill hole LOY15-001 (EOH 500m) targeted a ~250m deep VTEM conductor, identified by Bass Metals (Murphy and Bates, 2009) as a potential copper rich skarn. No significant mineralisation was encountered (No. Analytical Samples = 6), however weak skarnification and calc–silicate alteration was evident immediately beneath the targeted 250m deep zone (~265 to 290m) at the down dip end of the modelled conductor.

Tertiary basalt was intersected to 117m, followed by abundant Ordovician limestone. Weak skarnification and calc– silicate alteration was intersected in the ~265 – 290m target zone. No significant results were returned from 6 drill core samples (max 0.1% Zn??).

The magnetic high and conductive anomaly at surface west of the LOY15-001 collar is possibly explained as basalt feeder related, however a (west dipping) magnetite-related origin is possible given the occurrence of magnetite lodes approximately 1km north in Puffers Creek.

Regionally, the Bass No. 1 conductor target represents a similar target, but is more likely to be magnetite related, given the closer proximity to the Puffers Creek Ironstone and likely correspondence with a significant ground magnetic high (Data to be assessed). Various potential prospects for follow up were identified from a cursory reprocessing and interpretation of the VTEM data in conjunction with other regional (MRT) GIS datasets. Minor literature review complimented this research.

Ground magnetic surveys were undertaken by Edrill in the Peak Hill and Lunn’s Farm areas to better characterise magnetic anomalies and magnetite distribution. Three rock chip samples were collected from mostly ironstone outcrops with multielement analysis undertaken to assess metal potential. A rock chip from along inferred strike from the Redwater Creek magnetite Prospect returned >50% Fe, as well as trace indications for Sn (97ppm) and Zn (909ppm).

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List of Figures and Tables

Introduction

This is the first annual report for Loyetea (EL12/2014; 83^{2}km), granted to Edrill Pty. Ltd. on 30/7/2014. The tenement is located in NW Tasmania, approximately 20km south of Burnie (Figure 1 & 2). The datum used in the report is GDA94.

This report details cursory logging of drill hole LOY15-001. Logging was undertaken over approximately 1day and consequently detail is lacking in the geological log. Focus was upon key features including lithology, mineralisation, alteration and oriented core structure, ensuring that the overall picture was characterised. A drill log is appended.

A brief field visit was undertaken. Magnetic susceptibility readings on both drill core and rock (see digital data appended) in the Loyetea (EL12/2014) area were collected to assist with potential future modelling.

A cursory regional review of available GIS data was also undertaken for insight into future targeting. This utilised Bass Metals VTEM and MRT datasets to identify magnetite, Pb-Zn skarn and Sn-W granite related mineralisation targets. Minor VHMS potential also exists with Mount Read Volcanics cropping out within the licence. Ground magnetic surveys undertaken in the Peak Hill and Lunn's Farm areas by Edrill compliment this data.

Review of Previous Work

Literature pertaining to Loyetea EL12/2014 has only briefly been reviewed by the author. GIS review was undertaken utilising a number of regional datasets.

Previous work undertaken prior to the granting of Loyetea EL12/2014 is detailed in Murphy and Bates (2009) and Hansen (2014; appended). This report does not re-iterate these details although of significant note is the Bass Metals commissioned VTEM survey extending across, as well as north and south of the tenement. Previous drilling within EL12/2014 is tabulated below.

Geology

Much of the tenement is covered by Tertiary Basalt. This overlies Proterozoic Burnie Formation, interpreted as being over thrust onto Denison Group sediments and Mount Read Volcanics (MRV) equivalents. Of key importance is the intrusion of the Housetop Granite, belonging to a suit of tin bearing I and S type granitoids of Middle Devonian to Early Carboniferous age. Gordon Limestone, overlying the Dension Group, provides a potential target for skarn deposits. The geology and exploration history of the Loyetea Tenement Area is further described in Murphy and Bates (2009; see also Figure 1).

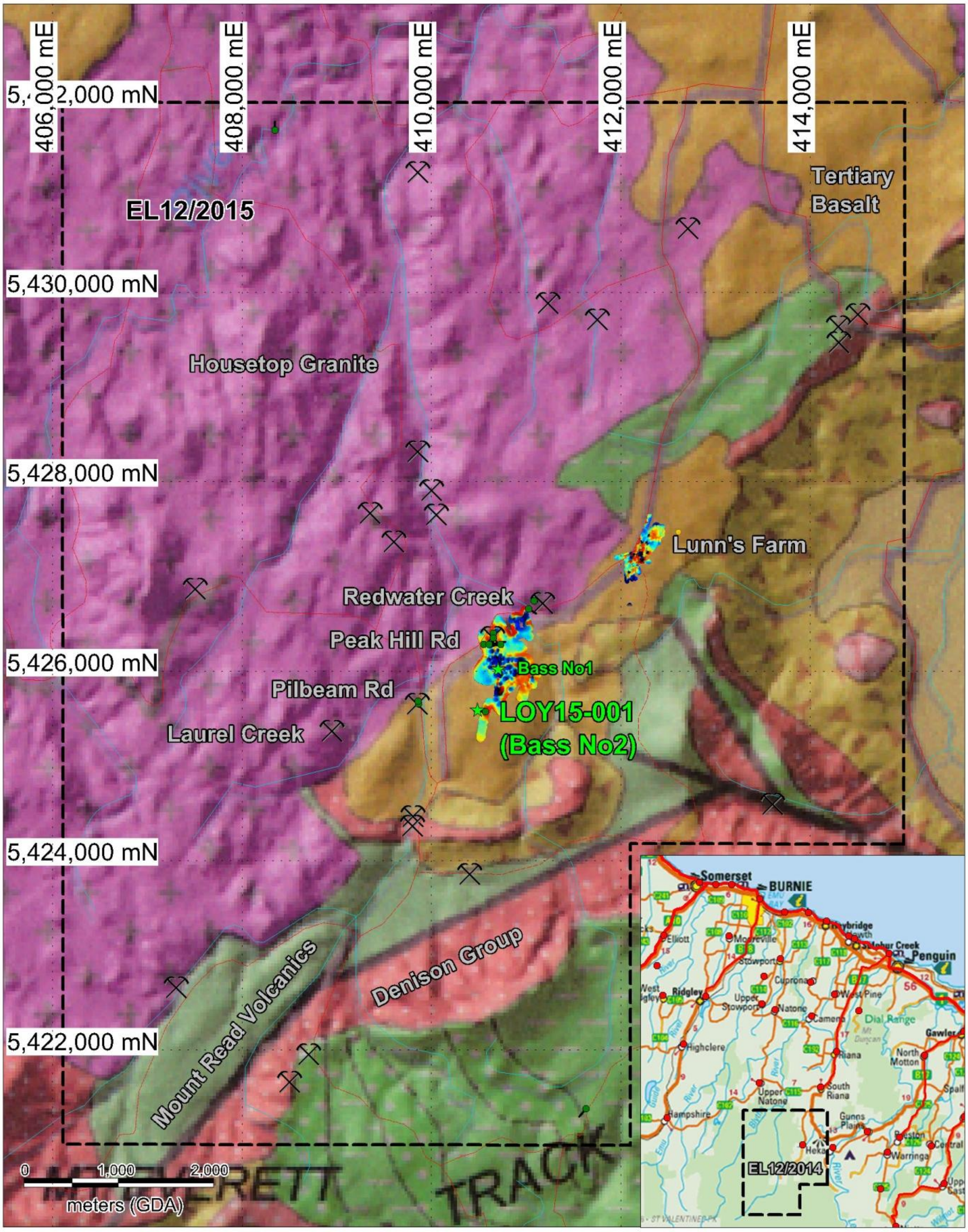

Figure 1: Location of Loyetea EL12/2014 (Inset) and 1:250k (MRT) Geology of the Loyetea area highlighting key prospects, Bass Metals targets (after Murphy and Bates, 2009), drill holes (green) including LOY15-001 and ground magnetic grids.

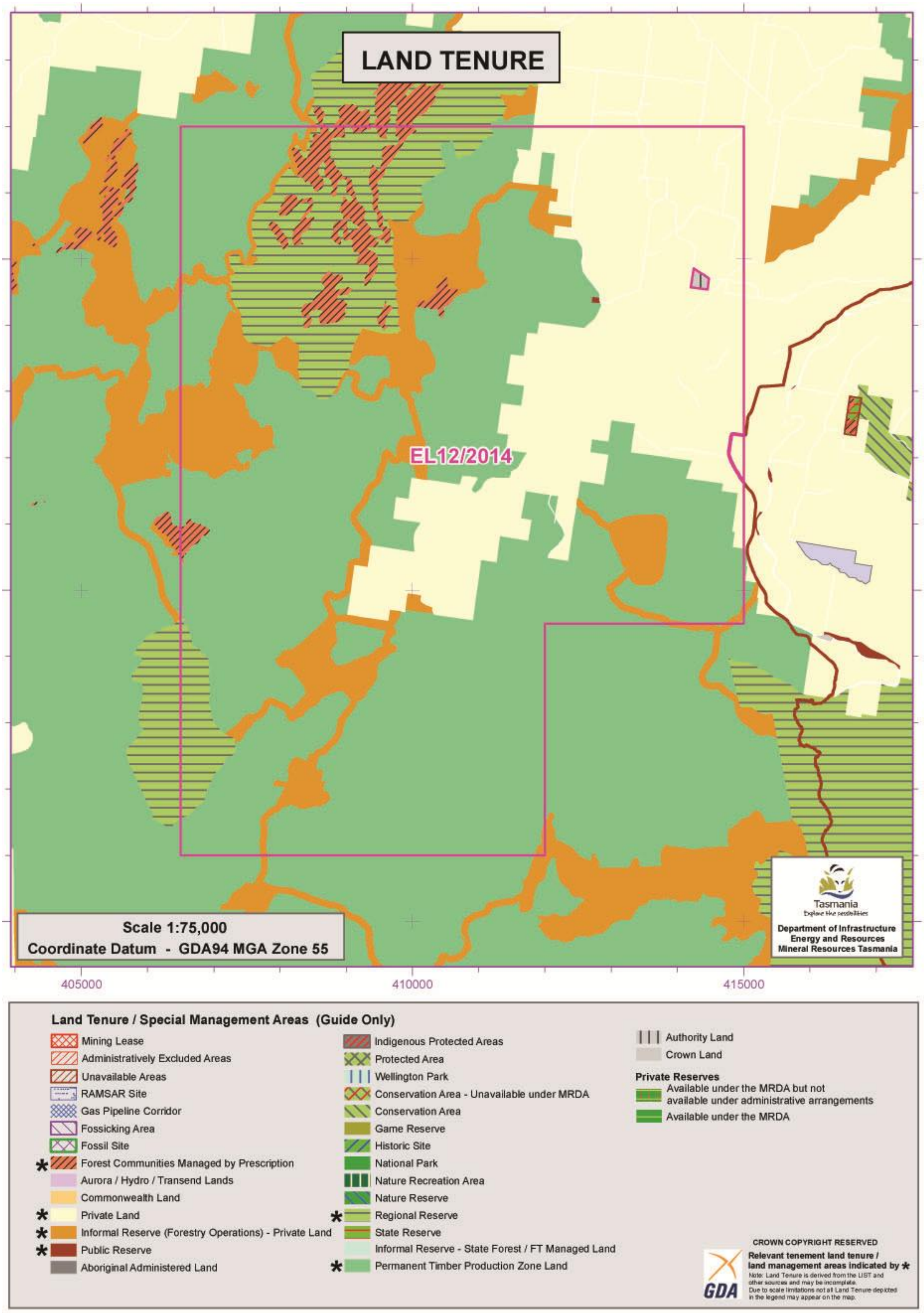

Figure 2: Land tenure for Loyetea EL12/2014 (Sourced from MRT).

Drill Hole	Company	Date Drilled	Depth	EastAMG	NorthAMG	Azimuth	Dip	Drll_typs
RED1 Redwater (Loyetea)	Shell	1-Mar-79	146	410915	5426475	123	-50	Diamond
RED2 Redwater (Loyetea)	Shell	1-Apr-79	58.85	410975	5426560	103	-55	Diamond
RED3 Redwater (Loyetea)	Shell	1-May-79	104.1	410440	5426100	78	-60	Diamond
RED4 Redwater (Loyetea)	Shell	14-Dec-80	349.4	410500	5426100	80	-60	Diamond
RED5 Redwater (Loyetea)	Shell	16-Feb-81	203.6	410620	5426100	260	-60	Diamond
RW-4 Redwater Pilbeam Road	Jervois Mining NL	14-Mar-97	76	409751	5425475	180	-60	RC
RW-1 Redwater Forest Traverse	Jervois Mining NL	4-Jan-97	120	410540	5426215	180	-60	RC
RW-2 Redwater Forest Traverse	Jervois Mining NL	7-Mar-97	105	410543	5426165	180	-60	RC
RW-3 Redwater Pilbeam Road	Jervois Mining NL	11-Mar-97	77	409750	5425500	180	-60	RC

Table 1: Previous drilling in the Peak Hill area (Note a few more holes have been drilled elsewhere in the tenement; Source MRT).

Work Conducted

Drilling

LOY15-001 collar details are 410567mE, 5425571mN (GDA, Z55; waypoint average), azimuth 264TN, Dip -75.41 and EOH 500m. Drilling was undertaken in an existing clearing within forestry. Edrill commenced the hole on 30/1/2015 and completed on 10/3/2015. The target was a ~250m deep VTEM conductor, identified by Bass Metals (Murphy and Bates, 2009) as a potential copper rich skarn. Significant magnetite, Sn and W potential also exists in the area.

The drill hole was surveyed with a DeviFlex tool, finding that dip varied little with some swing in azimuth to the north (~10^0). PVC pipe (40mm) was placed along the length of the hole in anticipation of a future DHEM (Down Hole ElectroMagnetics) survey. This survey would best await completion and assessment of results from drill testing of a nearby ground magnetic and VTEM target (Bass No. 1). Averaged magnetic susceptibility readings were recorded for core run intervals (see LOY15-001 Drill Log.xlsx appended). Magnetic susceptibilities were elevated in the top of hole basalt (~8 to 12SI), but low in general beneath the basalt (<0.4SI) in the limestone.

Massive basalt with minor carbonate filled amygdales and carbonate veining on mostly straight fractures extends from the top of hole to 116.6m (Figure 3). The base of the basalt appears to be a flow base with a chilled glassy margin, above which is weak alignment of lenticular carbonate filled amygdales (filled gas vesicles). Beneath the basalt is a breccia bearing mostly limestone clasts and minor light brown silica rich fragments; representing a Tertiary elluvial and palaeosol surface. A basalt intrusive occurs down hole at 175.8 to 177.5m. Proximity to a main basalt feeder is possible?

The limestone is largely massive, but locally shows narrow zones of laminar bedding and approximately bedding parallel oolitic zones (Figure 4). Very thin / laminar interbeds of dark grey shale are sparse. Limestone appears more recrystalised with depth. The limestone is commonly only weakly broken and often fractures at 90degrees across the core.

Only minor alteration is evident in the limestone to approximately 200m, then a zone of semi-pervasive to locally pervasive silica/calc-silicate as well as cream to light brown calc-silicate alteration extends to ~300m. The cream calc-silicate is often weakly iron oxidised after sulphide and locally displays fine dentritic oxide like vein haloes. A further alteration type in this interval is a green homogeneous very fine grained calc–silicate which commonly forms irregular veinlets with cream silicate / calc silicate alteration haloes to individual veins locally. Near skarn-like pervasive green zones are similar to the green calc-silicate and are often accompanied by semi-pervasive silica/calc-silicate overprint (Figure 4). The calc-silicate alteration often replaces bedding and also pervades out from fractures.

The skarn-like alteration evident between 265m and 290m, but best focused around 287m, may reflect a zone peripheral to genuine skarn. When displayed on drill section (Figure 5), this zone lies at the down dip extent of the targeted Bass Metals' modelled conductor.

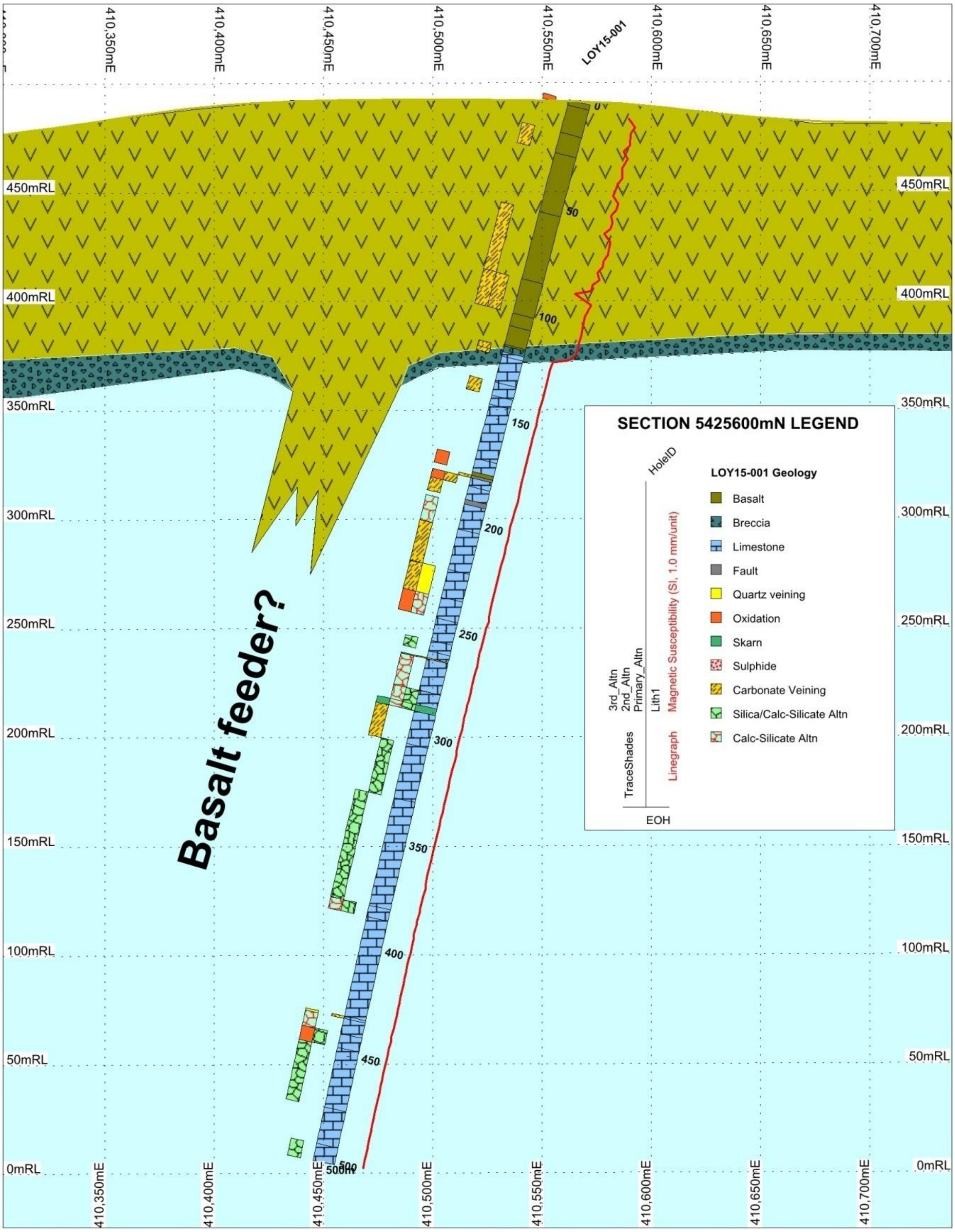

Figure 3: Section 5425600mN displaying LOY15-001 drill hole trace with basic geological interpretation

Figure 4: Semi-pervasive green calc-silicate / skarnified zone @387.4m (left) and Oolitic and laminar bedded limestone (right).

Carbonate veinlets are most common in the upper portion of the hole, overprinting both the basalt and limestone lithologies. Veins are straight and sometimes slightly irregular in form within the limestone. The basalt is host to mostly flat planar carbonate veins, reflecting straight fracture developed in the relatively homogeneous host. Veins are commonly 1 to 2mm in width. Correspondingly little carbonate veining is evident within the calc silicate portions of the hole and this evidently reflects a primary alteration zonation with veining more distal to heat source.

No appreciable sulphide concentration is evident, with the exception of minor zones of 2 to 3% extending over sub metre intervals. Sulphides are generally in disseminated form within the calc silicate alteration and locally at calc-silicate vein margins.

Structure

Core orientation utilising a spear and chinagraph crayon marker was undertaken. Orientated structures were measured crudely and can be considered as +/-~5 to 10 degrees in accuracy. There is some scope to collect more orientations to better define fracture and vein trends. However given the commonly massive nature of the limestone little more of importance can be achieved.

A key understanding gleaned from the orientated core was bedding attitude. Bedding within the limestone appears to resolve a moderately NW plunging fold axis (Figure 6). This fits with the expected regional trend.

A small cluster of mostly carbonate vein orientations (No.=5) average 36^0dip to 196^0TN, i.e. striking ~290^0TN; WNW strike with moderate SW dip (47^0 to 293^0TN; Figure 7). These vein orientations possibly reflect fold related structures, given the similarity to the calculated fold hinge strike. There aren't enough readings to resolve further vein orientations. Comparatively, fractures have a weakly preferred SW to SSW strike.

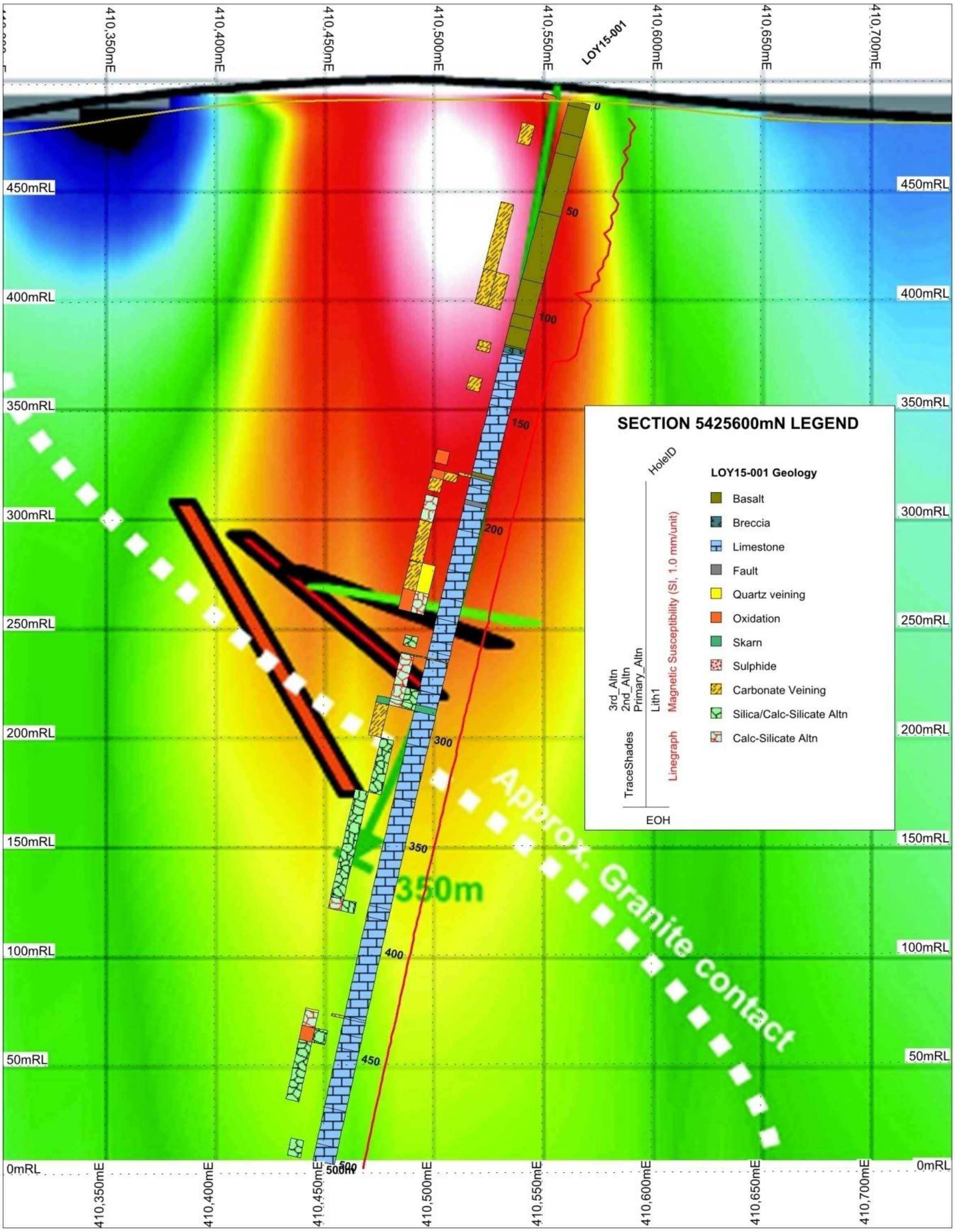

Figure 5: Section 5425600mN displaying LOY15-001 drill hole trace with geology, alteration and magnetic susceptibility over Bass Metals planning diagram showing interpreted conductor position and gridded modelled magnetic susceptibility.

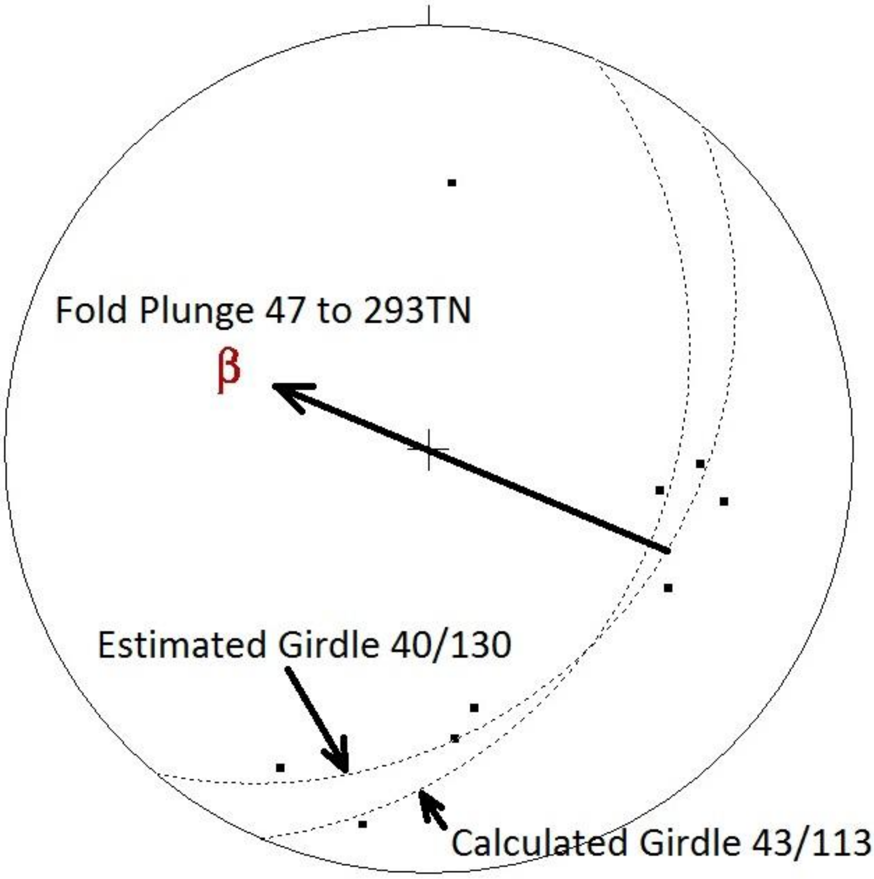

Figure 6: Stereographic plot of poles to bedding showing interpreted fold plunge of approximately -450 to -500 to 2900 to 3000TN.

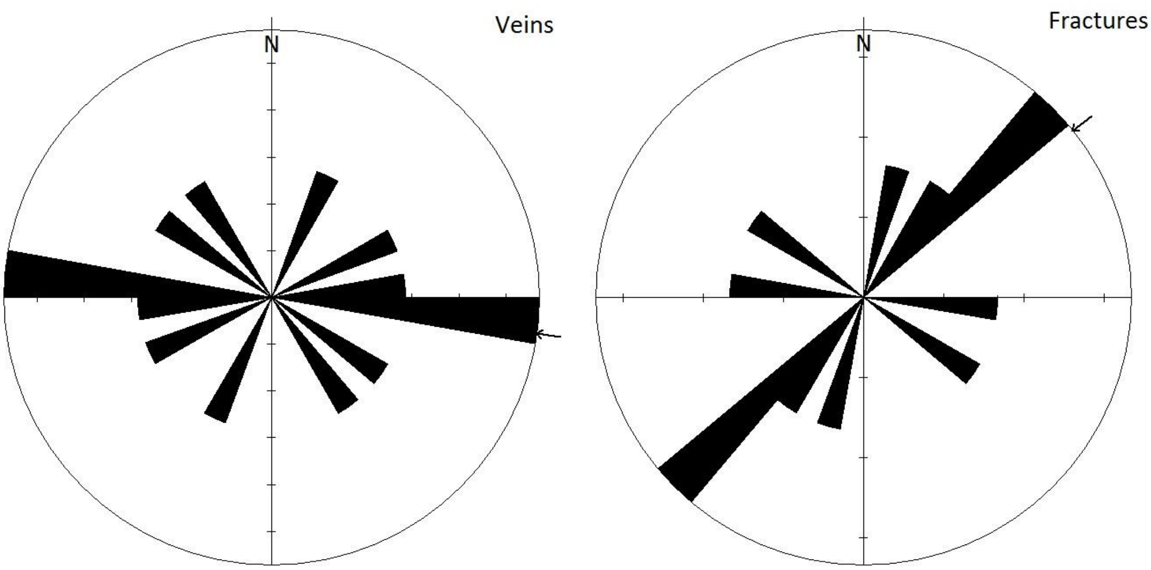

Figure 7: Rose diagram plots for veins (No.=7) and fractures(No.=6).

Analysis

Three better mineralised samples were collected by Edrill and analysed via multielement ICPMS and fire assay for Au (see drill log and digital data appended).

- S.Poke 1:- Basalt with 2 to 3mm carbonate veining(~1%) on fractures 66.7 to 67.7m.
- S.Poke 2:- Grey limestone, local recrystalised / silicified zones bearing sparse py(0.25 to 0.5%) from 149.3 to 150.3m.
- S.Poke 3:- Limestone, including a 5cm calcite-sphalerite(tr)-galena(tr) vein, from 399.8 to 400.8m returning 547ppm Zn.

A further three sequential samples tested weak skarnification and calcsilicate mineralisation from the down dip projection (284.5 to 287.5m) of the modelled target (~260 to 285m). No significant analysis were returned.

No significant analysis were returned. The basalt was not un-expectantly high in iron (9%), with low Co, Cr, Cu, Ni and V likely reflecting lithogechemical values. The calcite veining with visible sphalerite and galena returned 547ppm Zn and 76ppm Pb. Limestone samples returned ~28% Ca and lesser Mg to 7% as expected. Sn and W were low in all samples, but the basalt contained 2.9ppn Sn.

Loyetea Field Visit

The LOY15-001 site was visited. A profile along the drill trace was made, gathering geological observations and magnetic susceptibility readings. The later may aid future magnetic modelling. Basalt float is common at surface, with a notable outcrop area (<100m) due west of the collar. This area has little top soil and consequently no tree growth. Magnetic susceptibilities here were in the order of 8 to 12SI, similar to that encountered in basalt from the top of LOY15-001. Lower tenor readings from ~1 to 7 were returned from float basalt in the collar area and further east.

Another magnetic high drill target area (Equivalent to Bass conductive target No 1?) was briefly investigated. Drill pad location can be readily made almost anywhere in the vicinity, given the open eucalypt plantation and proximity to a forestry track with a significant cleared width. A dry dam is located within ready pumping distance, but drilling sourcing water here awaits spring rain. Ground magnetics alignment is approximately N-S, whereas VTEM grids suggest targeting with a ~315^{0}TN or 135^{0}TN aligned drill hole. A 135TN hole azimuth maybe preferable given that no significant magnetite source was drilled in LOY15-001. A better understanding of magnetite lode / mineralised structure dip in the area is required. Magnetic susceptibility in basalt float varied from 1 to 4SI near the road (potential drill collar area) to 7SI at approximately 75m west, nearer to the ground magnetic target.

Iron Stone outcrops on the road side to the south of this target, near Puffers Creek. Impressive ironstone boulders to 6 by 3 by 3m meters (257SI) are evident here as well as an outcrop of ~5 to 6m observed width (68SI). Float boulders of ironstone extend down slope of the road. An enigmatic 1.5m granite boulder is located here too (0.22SI). Granite is known to lie immediately west of the Puffers Creek approximately 150m east of the outcropping ironstone. Upstream from the bridge is a zone bearing sub rounded ironstone alluvium cutting out at a known point. High magnetic readings were returned from this extension of the roadside outcrop. Magnetic susceptibility ranged from ~36 to 856SI; average 525SI. This ironstone appears to have a 250 to 255^{0}TN strike from aligning GPS waypoints.

The Puffers Creek ironstone has previously been drilled. Investigation of MRT records for these holes is yet to be undertaken. Drill collar details are listed below in Table 1.

Rock Chip Sampling

3 rock chip samples were collected by Edrill. Digital data are appended in EL122014_201507_07_SG_1.xls.

A hole dug on a ground magnetic high ~400m (along strike?) south west of the Redwater Creek (magnetite) Prospect (Figure 9). Sample 7 returned weakly anomalous Sn (97ppm) within a sample bearing >50% Fe, 1.15% Mn and 909ppm Zn. The sample was not seen, but accessory elements such as 7ppm Bi, 9ppm Sb and 9ppm Mo suggest the rock is a magnetite skarn.

Sample GAL No.5 CK came from near the Laurel Creek magnetite skarn (Figure 1). It contained 20.6% Fe, as well as 8ppm Sb. The sampler had thought it might be Scheelite bearing; a possibility given the 90ppm W returned.

Sample 8 was from a roadside cutting near the eastern tenement boundary contained 52ppm Cu and 10.9% Fe.

Ground Magnetics

Ground magnetics covering the Peak Hill (9.6line km) and Lunn's Farm (4.75line km) areas totalled ~14.5line km. Edrill's Gary Lavell undertook the surveys on an ad hoc basis with a G856, covering readily accessed areas.

The Peak Hill (Bass No.1 target) area was ground magnetic surveyed at approximately 40m spacing. The survey used variable line orientations of mostly E-W and NE alignment, with each station GPS located. No base station was used for diurnal correction, however a base reference mark was measured daily on survey commencement and ending. Point data was digitised and roughly edited to create first pass grids for Peak Hill and Lunn's Farm (Figures 8 & 9).

Infill lines on NW orientation are required near the Redwater Creek Prospect to better define the distribution of the known ironstone. Follow up geochemistry (>50% Fe Sample 7; Figure 8) on a ground magnetic high located ~400m southwest of the later justifies this.

Regional Review

The Housetop Granite is readily defined by total count radiometrics. Known magnetic highs/ironstone appear to lie within less radiometric areas adjacent to the granite. Modelled Devonian Granite isobars indicate there is a steep sided granite margin with a lower inclination in the Loyetea prospective area. The WTRMP aeromagnetics 1VD (First Vertical Derivative) was interpreted to identify various lineaments and structural trends (Figure 10).

The Bass Metals 2008 VTEM data was downloaded. Displaying grids and clipping the data to accentuate the EM highs, shows that the most significant part of the EM high, in the Puffer Creek area, lies roughly coincident with the ground magnetics target area, planned to be drilled next (No 1. in the Bass Metals 2009 Annual; Located immediately SE of previous BHP drilling; Figure 11). This anomaly is stronger at longer EM times, when compared to the LOY15-001 targeted anomaly. EM profiles were not investigated to assess why the LOY15-001 target (No. 2) was perplexingly preferred by Bass.

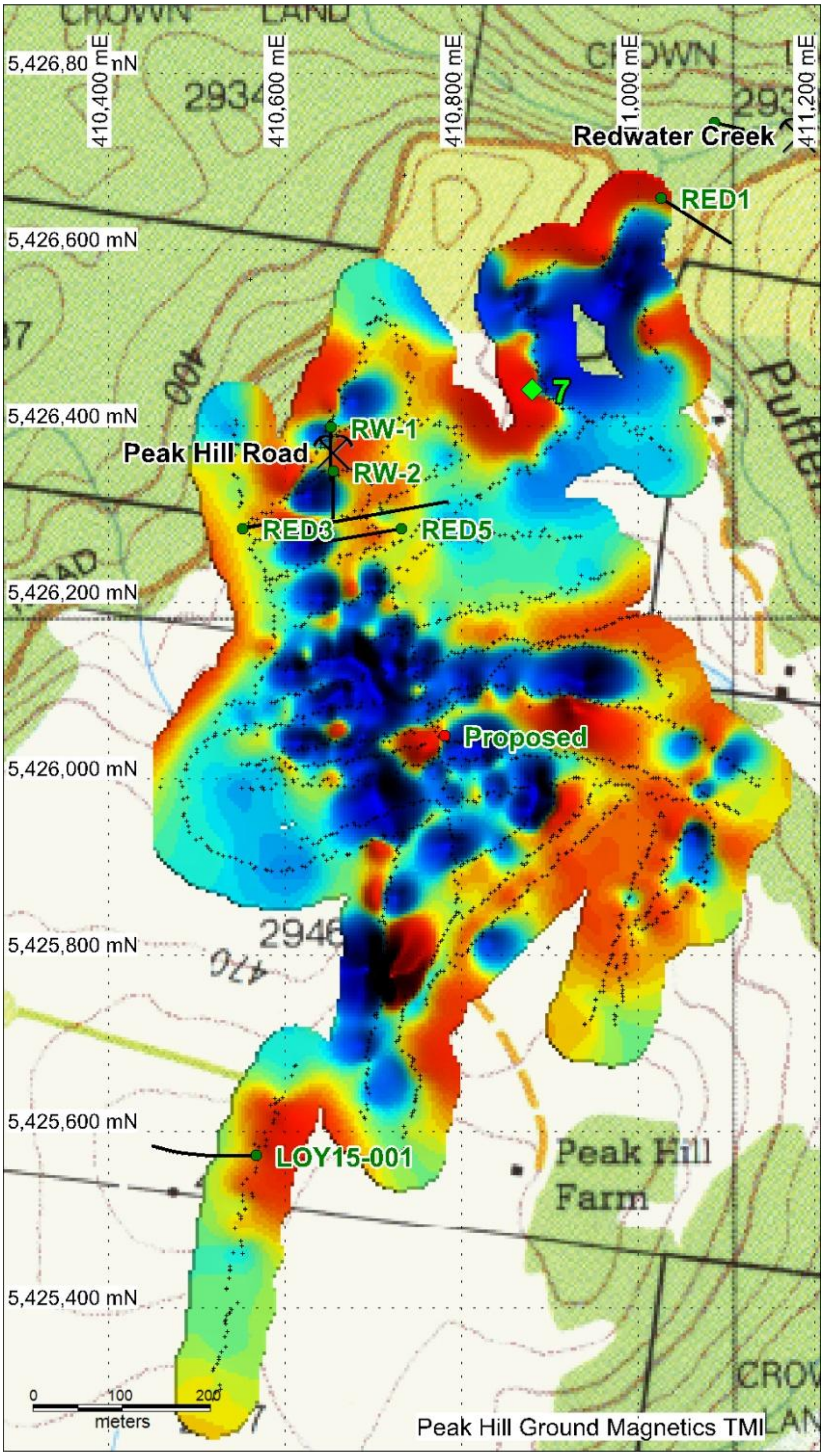

Figure 8: Peak Hill ground magnetic TMI image showing prospects, drill holes (green circle) and potential collar (red), as well as rock chip sample 7 location.

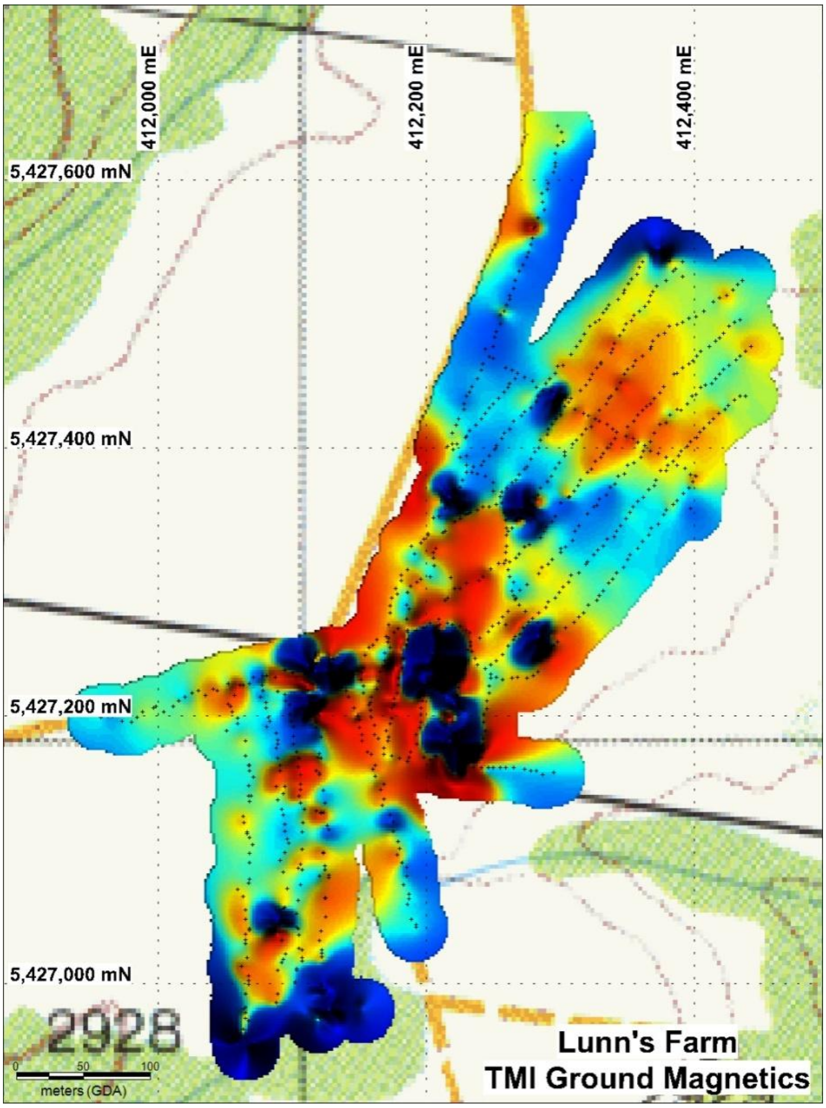

Figure 9: Lunn's Farm ground magnetics image TMI.

Another curiosity are the EM maps in Bass Metals 2009 annual report, in which their Figure 8 shows an EM Channel 20 image, which is unlike the gridded data provided by the digital report. This immediately questioned the LOY15-001 collar placement, which appears to target a weaker portion of the EM off the shoulder SE of the strongest zone, but coincident with a strong magnetic anomaly from the VTEM survey. The coordinates were cross checked finding the collar was placed within +/- ~5m of the Bass planned collar (actual GPS averaged 410456mE, 5425389mN AGD66 versus planned 410450mE, 5425383mN).

VTEM aeromagnetics data was regridded as TMI (Figure 12), 1VD (First Vertical Derivative) and RTP (Reduced To Pole) images for interpretation. A clipped image of TMI clearly delineates magnetic trends and illustrates apparent fault offsets that are interpreted to form under sinistral wrench offset on NW aligned structure zone. The prospective area fits in a flexure on this NW aligned structure. The ~250 to 255^0 orientation of Ironstone mineralisation in Puffers Creek fits with this model.

The VTEM readily shows the Tertiary basalt cover at surface, particularly in Ch10. However when the grids are clipped to enhance stronger responses, a general alignment of strongest CH20 & 25 EM and local coincidence with lineaments, interpreted from First Vertical Derivative (1VD) in MRT's WTREMP 2002 aeromagnetics, is evident. Channels 20 and 24 are interpreted as more indicative of better bedrock conductors. Whilst re-gridded VTEM channel 10 appears to conform to structurally aligned magnetic highs outlining basalt distribution (including basalt feeders?). The linear features may result from fissure style eruption of basalt along faults, with more plug–like feeder zones at or near structural intersections. These structures are also potentially accessed by magnetite skarn from the Housetop Granite. The very strong extensive (square edged) EM anomaly in the north of the survey is coincident with Tertiary Basalt; possibly reflecting a considerable basalt thickness.

Another VTEM dataset incorporating the main targeted area, but excluding the extreme high in the north, was also extracted allowing better assessment of EM character in the immediate drill targeted area.

A number of prospective zones were identified from data analysis and interpretation (See Figures 11, 12 & Table 2).

Prospect	Priority	Comment
Bass No.1	1	Skarn Potential; Bass No.1 Target; coincident ground magnetics high and VTEM24
3	3	Greissen & skarn potential; VTEM conductor @ granite contact with limestone?
5	5	Skarn potential; VTEM conductor @ structural intersection
4	4	Greissen & skarn potential; VTEM conductor @ granite contact with limestone?, adjacent to hag high
Laurel Ck Fe	3	Known Ironstone, Greissen & skarn potential; discrete Magnetics high & weak VTEM conductor @ granite contact with limestone?
2	2	Magnetite Skarn potential; VTEM conductor, spot mag high near structural intersection; Weak VHMS potential in Tyndal Group volcanics
Puffers Ck	3	Drilled; Greissen & magnetite skarn potential; VTEM conductor and mag high @ granite contact with limestone?

Table 2: Summary Prospect character and approximate exploration priority; locations in Figures 11 & 12.

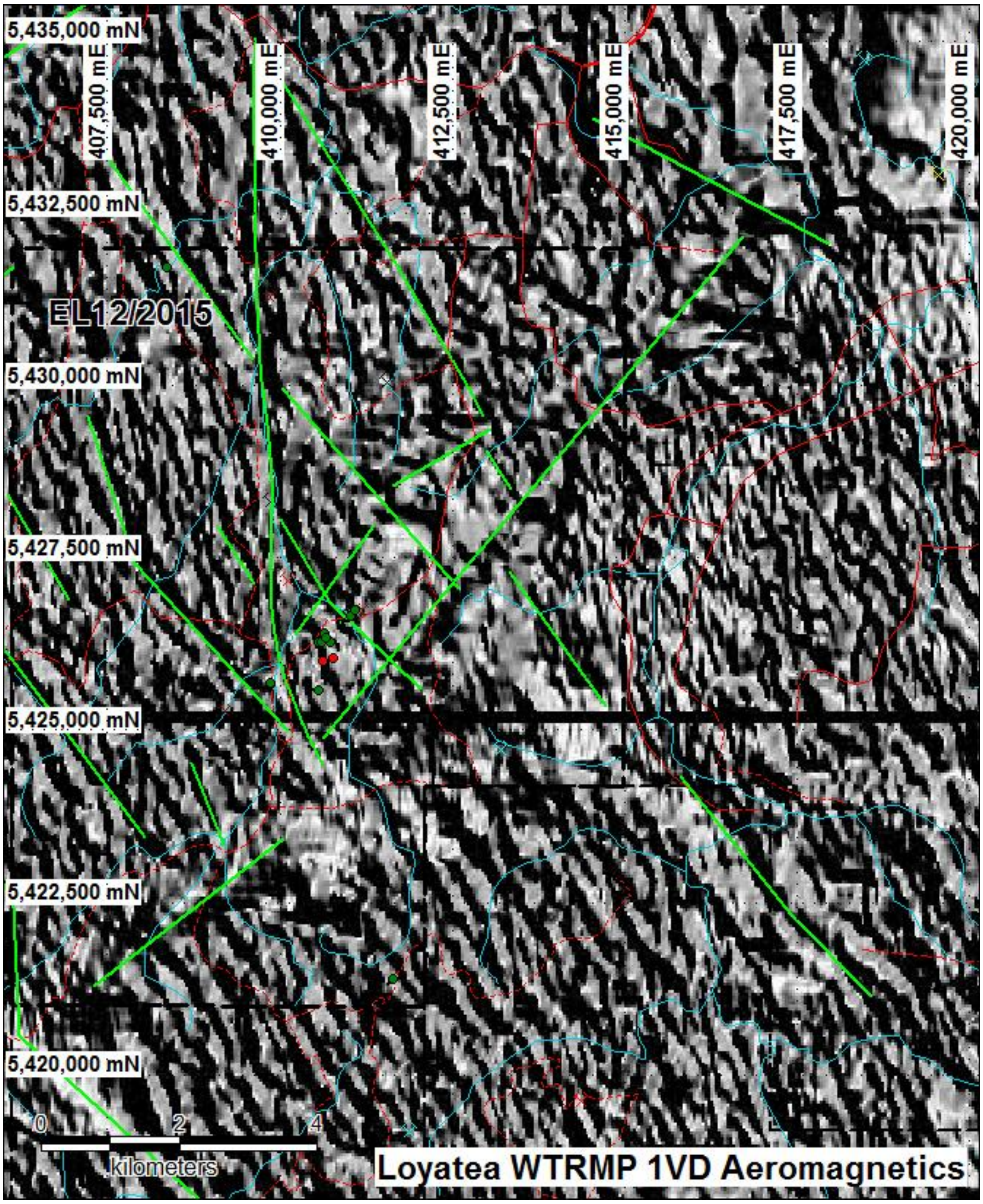

Figure 10: VTEM CH25 grid transparency over WTRMP 1VD Aeromagnetics gridded image, lineament/structural interpretation (green lines), as well as existing (dark Green) and potential (red) drill holes.

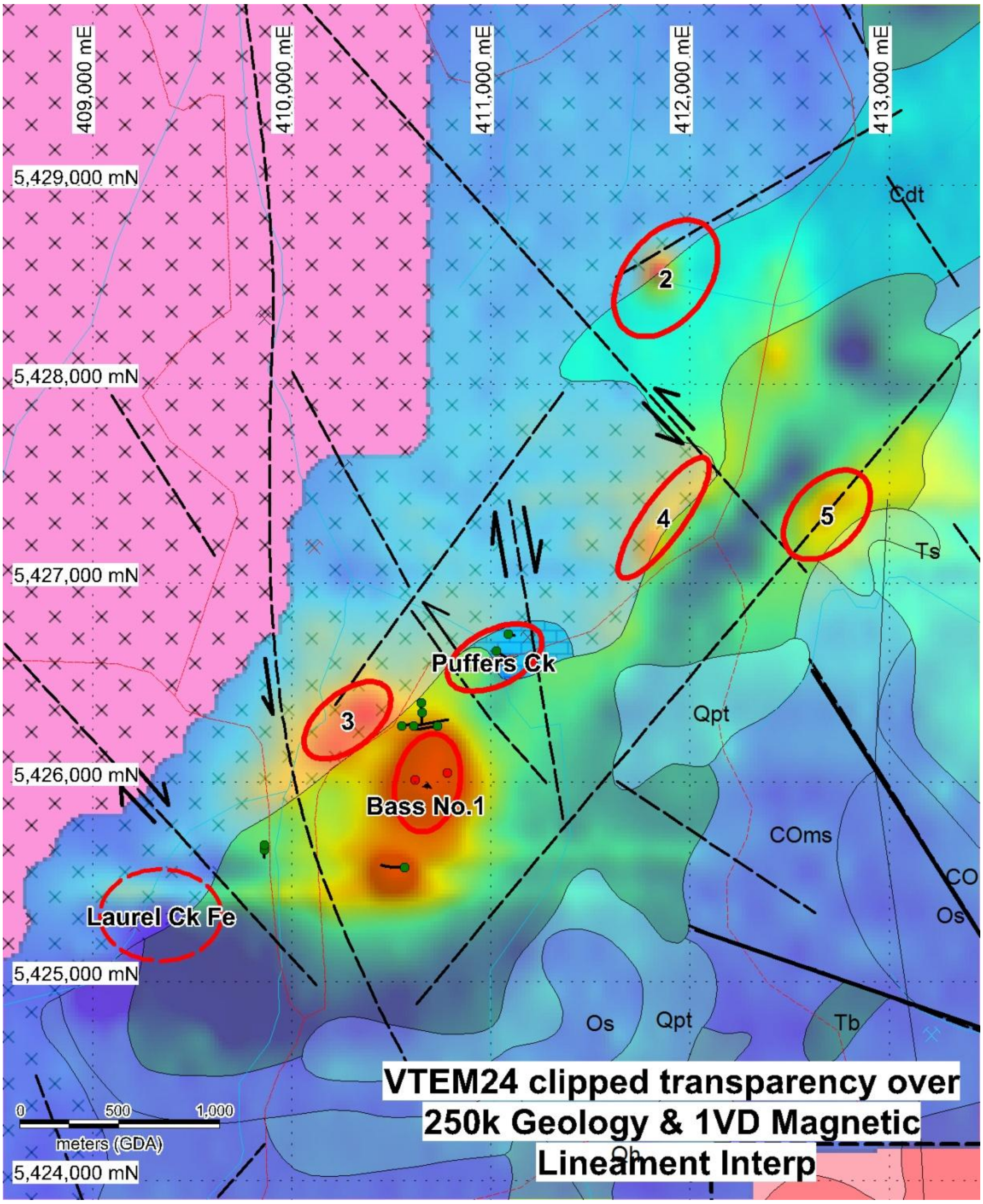

Figure 11: VTEM CH25 grid transparency over 250k scale MRT geology and WTRMP 1VD Aeromagnetics lineament/structural interpretation (dashed lines), mapped faults (solid line), as well as existing (dark green) and potential (red) drill holes.

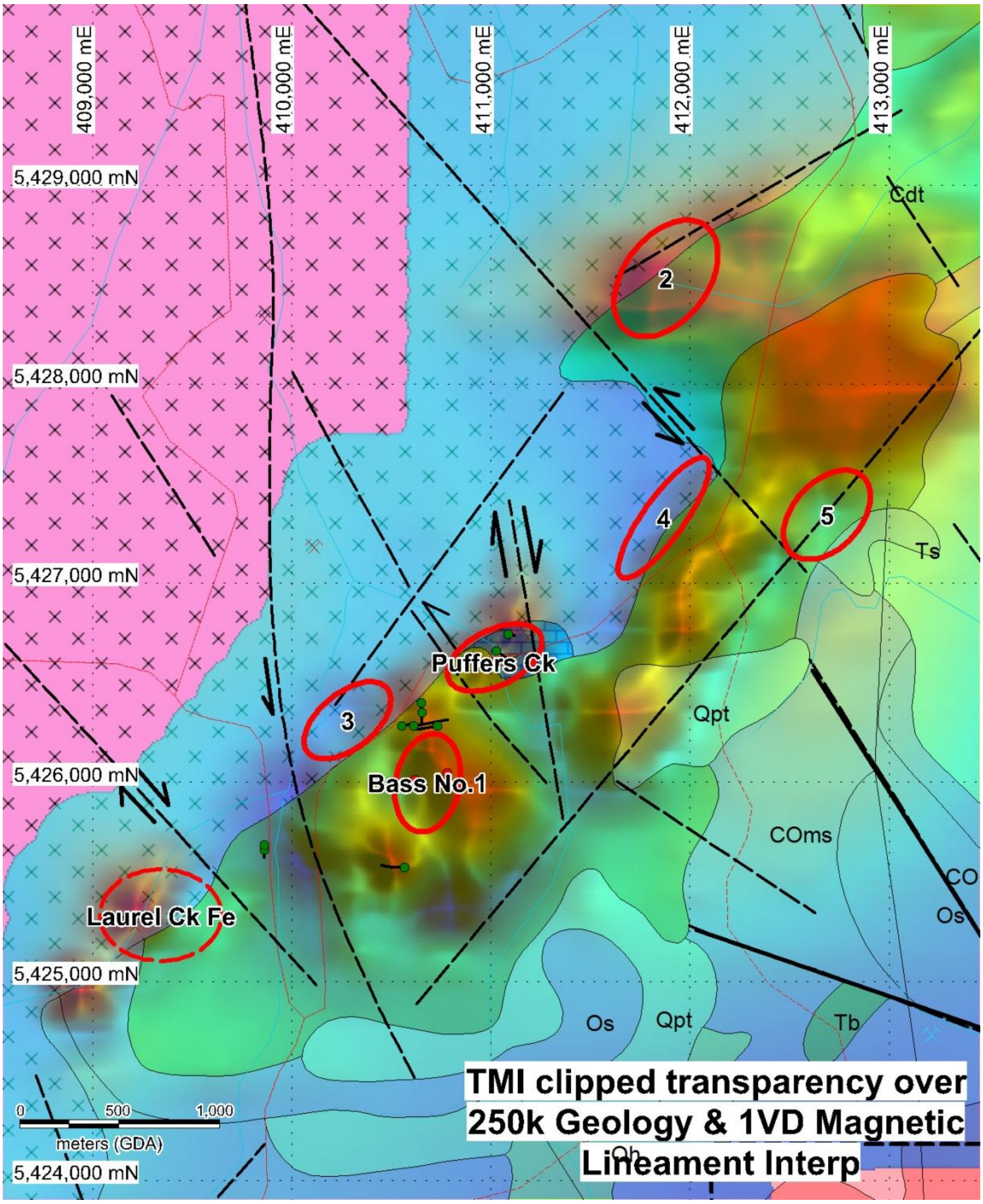

Figure 12: Clipped TMI (Total Magnetic Intensity) grid transparency over 250k scale MRT geology and WTRMP 1VD Aeromagnetics lineament/structural interpretation (dashed lines), mapped faults (solid line), as well as existing (dark green) and potential (red) drill holes.

Discussion

Ironstone outcrop potentially formed palaeo highs prior to tertiary basalt eruption. The goethitic hematite – magnetite at Nelson Bay River exhibits this character. Similarly the road side ironstone outcrop only has a thin ~5m+ basalt elluvium cap. Consequently, it's possible that the basalt capping over any of the area's ironstone may be thinner than surrounding palaeo lows. This gives confidence in targeting the most elevated magnetic highs in the area. Conversely, the basalt extrusive feeders may also focus upon structural weakness previously mineralised by the magnetite bodies (Skarns). The basalt thickness is considered to be ~30 to 40m in the area, but was 116m in LOY15-001. A local deepening of basalt to the south is possible.

The VTEM survey combined with ground magnetic surveys provides a distinct advantage over past explorers. The VTEM survey was undertaken on 200m spaced E-W lines and as such introduces a bias towards this orientation. Consequently, the gridded magnetic images inaccurately reflect the magnetics, which is clearly better reflected in the ground magnetic survey. Further, the VTEM magnetometer sensor was placed high and is likely less accurate than the magnetic specific 2002 WTRMP survey. It's recommended that the ground magnetics survey be digitised to incorporate / compare with other GIS data.

The mostly planar carbonate veins in the basalt are likely formed from late stage basalt-related fluids; party via adsorption of the limestone? These relatively low temperature fluids may have locally scavenged metal. Such scavenging would likely be focused in hotter zones proximal to basalt feeders; interpreted to be reflected by magnetic and conductive highs within the basalt. The nearby drilled Sn in soils anomalies overlying basalt, are possibly partly of scavenged metal origin, but more likely result from accidental lithics ingested by basalt passing through the feeder zone or possibly are partly lithogeochemical in origin. Notably a single basalt analysis from LOY15-001 bears detectable Sn (2.9ppm). Elsewhere, silica is known from beneath basalt flows (eg. Lune River area) and gold in the vicinity of dolerite feeders in SE Tasmania is inferred to be sourced from accidental clasts ripped from deeper mineralisation. The inference being that anomalous metals in basalt near extrusive feeders potentially reflect a deeper source, possibly related to the fertile Housetop Granite. Massive sulphide (VHMS) in the MRV at great depth beneath the Ordovician Gordon Group limestone is another potential metal source but such a target would be very deep in the LOY15-001 area. The precise thickness of the Owen Conglomerate (Denison Group) lying between the Gordon Limestone and MRV in the Loyetea area has not been assessed in this regard.

Environment

Drill Hole Abandonment Report

The LOY15-001 drill site was visited on 28/4/2015. The drill collar was relocated via GPS waypoint averaging (410567mE, 5425571mN GDA94, Azimuth 264TN, Dip -75, EOH 500m), confirming the previously reported collar location. The site, located on an existing access within forestry plantation, was excavator flattened prior to drilling and minor grass regrowth had occurred since the 10/3/15 drill hole completion.

The 100mm PVC collar pipe is foam sealed in place, has a glued cap and currently protrudes ~30cm above ground. 40mm PVC placed down the hole in anticipation of future down hole EM. The immediate collar area is surrounded by safety bunting (Figures 13 & 14). No water seepage was evident in the collar / pad area. No further remedial action is planned at this stage; awaiting potential down hole electromagnetic surveys following further planned drilling.

Figure 13: LOY15-001 drill pad looking SW.

Figure 14: LOY15-001 drill collar looking N.

Recommendations

- Extend and infill existing ground magnetic data; including infill at Peak Hill to better define known ironstone distribution. Surveys over prospective areas identified from regional GIS analysis.
- Geological mapping and ground truth priority areas.
- Drill the Bass No. 1 target; coincident EM and ground magnetic high.
- Further data review including digitally capture and display of previous drill hole data.
- Down hole EM; re-assess following drilling of the next target

References

Hansen, M, R., 2014. INFORMATIONAL MEMORANDUM On The Economic Mineral potential of Exploration Licence EL 12/2014. In house company report for Edrill Pty Ltd.

Murphy, M and Bates, B., 2009., LOYETEA PROJECT BLACK BLUFF RANGE GROUP TASMANIA EL52/2004, FINAL REPORT 8TH AUGUST 2008 TO 7TH AUGUST 2009. Bass Metals Ltd. Tasmanian Company Report.

Appendices

Appendix 1:- Appended Digital data

Exploration Work Type	Filename	File format
Report	EL122014_201507_01_Report.pdf	*pdf*
Drilling		
	EL122014_201507_02_SL_1.xls	xls
	EL122014_201507_03_DS_1.xls	xls
	EL122014_201507_04_DL_1.xls	xls
	EL122014_201507_05_Lithologycodes.xls	xls
	EL122014_201507_06_DG_1.xls	xls
	EL122014_201507_07_DStructure_1.xls	xls
	EL122014_201507_08_DGeoTech_1.xls	xls
magnetic susceptibility readings	EL122014_201507_09_DMagSus_1.xls	xls
Surface sampling		
	EL122014_201507_10_SG_1.xls	xls
magnetic susceptibility readings	EL122014_201507_11_SMagSus_1.xls	xls
	EL122014_201507_12_SGroundMagnetics_1.xls	xls
File Verification Listing *(this file)*	EL122014_201507_13_FileListing.xls	xls

Appendix 2:- LOY15-001 Drill Log

Drill Log — Edrill Australia Ltd.

PROJECT:	Loyatea		**HOLE NO:**	LOY15-001	**DRILL TYPE:**	Diamond
PROSPECT:	Peak Hill		**DATE COMMENCED:**	30/01/2015	**DRILLER:**	Edrill
TENENMENT:	EL12/2014		**DATE COMPLETED:**	10/03/2015	**LOGGED BY:**	R Reid
EASTING (GDA94)	410567.23	GPS	**TOTAL DEPTH (m):**	500	**LOGGING DATE:**	29/04/2015
NORTHING (GDA94)	5425571.19	GPS	**AZIMUTH (TN):**	264	**OXIDATION** BOCO:	2.4
COLLAR RL:	512.74	GPS	**DIP:**	-75	BOPO:	50

Drilling details

Core Size	From	To
PQ		
HQ	0.00	137.50
NQ	137.50	500.00
BQ		

Comments

Hole designed to:- Test Bass Metals Target 2; Coincident Magnetics and EM high

Summary Log

From	To	Description
0.00	116.60	Largely massive, locally weakly amygdaloidal basalt
116.60	119.30	Tertiary breccia; elluvium / palaeosol surface
119.30	500.00	Ordovician limestone

Significant Analysis Intervals:

Hole_ID	From	To	Interval

HOLE_ID	INTERVAL FROM (m)	TO (m)	ROCK CODES Lith1	Lith2	Mineralisation & Alteration summary Primary Altn	2nd Altn	3rd Altn	**Full description:** including colour, main alteration type and strength, component minerals (pref in order of abundance), rock type, texture, alteration and mineralisation details	Colour	Oxidation Style	Oxidation Amount (WMS)	Leaching Amount (WMS)	Broken Amount (WMS)	Magnetite Style	Magnetite Amount (WMS)	Silicification Style	Silicification Amount (WMS)	Carbonate Style	Carbonate Amount (WMS)	CbVn Style	CbVn Amount (WMS)	Pyrite Style	Pyrite Amount %
LOY15-001	0	2.4	LMB			OX		grey basalt. ora FeOx(w/m) on fracs. bk(m). BOCO 2.4			m		m										
LOY15-001	2.4	15.4	LMB					grey massive(msv) fg basalt. Carbonate(cb) filled amygdales(w), lht gn clayey frac fill. bk(w).					w					spt	w				
LOY15-001	15.4	25	LMB				CbVn	grey msv fg basalt. cb filled amygdales(w), crm cb frac fill(w) commonly at 27LCA. bk(w).					w						w	Vn	w		
LOY15-001	25	53	LMB					grey msv basalt. cb filled amygdales(w), lht gn clayey frac fill. bk(w).					w						w				
LOY15-001	53	84.7	LMB				CbVn	grey msv basalt. cb filled amygdales(w), cb vn frac fill. bk(w).					w						w		w		
LOY15-001	84.7	101	LMB			CbVn	CbVn	grey msv basalt. cb filled amygdales(w), lht gn clayey frac fill. bk(w).					w						w				
LOY15-001	101	107	LMB					grey msv basalt. cb filled amygdales(w), lht gn clayey frac fill. bk(w).					w						w				
LOY15-001	107	115.8	LMB					grey msv basalt. cb filled amygdales(w), lht gn clayey frac fill. bk(w).					w						w				
LOY15-001	115.8	116.6	LMB					grey msv basalt. cb filled amygdales(w), in commonly lenticular rounded form, this and vfg to glassy final 10cm suggests faulted contact focused at a chilled margin. bk(w).					w						w	Vn	w		
LOY15-001	116.6	119.3	BX			CbVn		broken(m/s) breccia zone (likely Tertiary aged). commences with semiconsolidated breccia with angular lmst frags in weakly clayey matrix. upper contact weakly irregular 88lca. lmst cb vnd(m) clasts to 25cm and angular tan ferruginous silicified? frags. weak 75lca alignment of frags in matrix indicates weak flow shearing near overlying basalt basal contact?. bk(m/s). dgrey irreg zones often at high lca in lmst frags croscutt by cb veining; the former maybe fingers of peperitic intrusive basalt at it's (basal) margin?					m/s										
LOY15-001	119.3	121.3	SLMST			CbVn		strongly broken zone in limestone with commonly low lca fracs. cb vnd(w/m) at low lca sim to fracs, also bearing with trace sulphide.					s							Vn	w/m		0.05
LOY15-001	121.3	133.6	SLMST					limestone, locally broken(m). overall broken(w). sparse pgn irregular calc-sil veining(tr)					m							Vn	vw		
LOY15-001	133.6	139.8	SLMST			CbVn		lmst bk(m) to strong locally. zones spotty recrystallised? cb altn(m).					m								m		
LOY15-001	139.8	144	SLMST					grey weakly altered lmst					w								vw		
LOY15-001	144	169.7	SLMST				Py	grey lmst, bk(w), local recrystalised / silicified zones bearing sparse py(0.25 to 0.5%). sample1 from 149.3 to 150.3m. start faulted /broken zone.					w										0.05
LOY15-001	169.7	175.8	SLMST				OX	lmst. bk(w/m). FeOx on facs(w)					w/m										
LOY15-001	175.8	177.54	LMB					lht grey / kaki vfg basalt intrusive?. bk(w/m). basal 50cm incorporates sub rndd lmst clasts. upper contact sharp, lower at 60LCA sharp.					w/m										
LOY15-001	177.54	178.8	FALT		CbVn			fault zone. Bk(s), bearing 45cm carb-qtz vein and lmst.					s										
LOY15-001	178.8	182.8	SLMST			CbVn	OX	strongly broken lmst, marginal to fault zone. FeO(w) on fracs. cb vnd(w/m),					s										
LOY15-001	182.8	189	SLMST				CbVn	lmst bk(w/m), FeO(w), irreg q-cb vnd weak overall, as several 10cm zones.					w/m										
LOY15-001	189	191.2	FALT					lmst with approx 20cm at both contacts comprising clayey fault gouge.															
LOY15-001	191.2	203	SLMST				CALS	lmst bk(w). with local zones of irreg tan calc-sil being(w) overall and extending as semipervassive zones over intrervals to 1m. FeO(w). gradational zone / contacts					w										
LOY15-001	203	222	SLMST				CbVn	lmst bk(vw). cb vnd(vw)					vw										
LOY15-001	222	235.2	SLMST			QVn	CbVn	lmst, bk(w/m), FeO(w), cb vnd(vw). sparse crm semipervassive lht bn calc-sil(w). 15cm q-cb vn at 230.8m. NB:- cb vn intensity drops significantly approaching semipervasive calcsil					w/m										
LOY15-001	235.2	245	SLMST			CALS	OX	crm tan calc-sil semipervasive zones often replacing bedding(w/m) overall. appears weakly recrystalised peripheral to calc-sil zones. FeO(w)															
LOY15-001	245	255.5	SLMST					grey weakly recrystalised lmst, bk(vw).					vw										
LOY15-001	255.5	260.5	SLMST			SILCAL		lht grey. lmst. gradational contacts. pervasive silica?(m) grading out through semipervasive selective bedding replacement margins. bk(vw).					vw										
LOY15-001	260.5	263.7	SLMST					grey lmst. bk(vw)					vw										
LOY15-001	263.7	264.2	CbVn		CbVn	SKARN		q-cb vein overprints weakly skarnified zone. annealed minor fault zone?															
LOY15-001	264.2	279	SLMST			CALS		lht grey and grey. lmst, semipervasive calc-sil altn(w/m), bk(vw).					vw										
LOY15-001	279	285.7	SLMST		SILCAL	CALS		crm and lht bn. lmst overprinted by perv sil(m/s) and crm tan calc-sil, gradational contacts															
LOY15-001	285.7	288.7	SKARN		SILCAL	CALS	SKARN	starts 70cm perv sil(m) overprinting gn calc-sil / skarn(w/m) with calc-sil(m) extending to end interval. 5cm irreg gn skn zone at 287.4. sil - skn @25LCA at lower end interval. NB: perv sil appears later than skarn and calc-sil overprinting on upper contact but less so in calc-sil below skarn.															
LOY15-001	288.7	304.1	SLMST				CbVn	grey lmst. cb vnd(tr). bk(w).					w										

HOLE_ID	INTERVAL		ROCK CODES		Mineralisation & Alteration summary			**Full description:**		Oxidation		Leaching	Broken	Magnetite		Silicification		Carbonate		CbVn		Pyrite	
	FROM (m)	TO (m)	Lith1	Lith2	Primary Altn	2nd Altn	3rd Altn	including colour, main alteration type and strength, component minerals (pref in order of abundance), rock type, texture, alteration and mineralisation details	Colour	Style	Amount (WMS)	Amount (WMS)	Amount (WMS)	Style	Amount (WMS)	Style	Amount (WMS)	Style	Amount (WMS)	Style	Amount (WMS)	Style	Amount %
LOY15-001	304.1	329.6	SLMST			SILCAL		lht gy lmst, calc-sil / perv sil altn(w/m), bk(w), NB: lht gn calc-sil has crm calc-sil vein halo with locally xcutting veins of similar suggesting faulting active during altn, locally lam bdd.					w										
LOY15-001	329.6	380.1	SLMST				SILCAL	gy lmst, calc-sil perv zones localy but weak overall															
LOY15-001	380.1	385.4	SLMST			SILCAL	CALS	gy and crm/tan Lmst oveprinted by crm perv sil(w/m) with gn calc-sil veinet overprint. in a bk(m) (faulted?) zone ending in 2m crm tan calc-sil(m).					m										
LOY15-001	385.4	432.25	SLMST					gy lmst bk(vw). largely liitle altered, minor weak crm calc-sil zones. Gn smectite clay veining in the interval 416 to 428m, 5cm calcite-sphalerite(tr)-galena(tr) vein at ~400m.					vw										
LOY15-001	432.25	433.3	SLMST		CbVn		QVn	sil-cb vnd(m/s), minor FeO disseminated after sulphide(3%) over basal 25cm.															
LOY15-001	433.3	440.4	SLMST				CALS	gy lmst bk(vw). largely liitle altered, minor weak crm calc-sil zones.					vw										
LOY15-001	440.4	447	SLMST			SILCAL	OX	gy and crm / lht bn lmst with calc-sil(w/m), FeOx(w) in cals-sil and on fracs															
LOY15-001	447	475	SLMST				SILCAL	gy and crm / lht bn lmst with calc-sil(vw), perv crm sil(w), FeOx(vw) in cals and on fracs localy															
LOY15-001	475	492	SLMST					grey little altered lmst. bk(vw)					vw										
LOY15-001	492	500	SLMST			SILCAL		gy and crm lmst, locally lam bdd. bk(vw). perv sil? / calc-sil overprint(w). EOH.					vw										

Hole_ID	Depth	Azimuth(TN)	Dip	Drill Code	Comment	Date	ID	Azimuth(Mag)	Type
LOY15-001	0	264	-75.41	DIA		1/05/2015	1		5
LOY15-001	3	263.72	-75.12	DIA		1/05/2015	2		5
LOY15-001	6	264.27	-74.4	DIA		1/05/2015	3		5
LOY15-001	9	265.13	-75.22	DIA		1/05/2015	4		5
LOY15-001	12	266.13	-75.21	DIA		1/05/2015	5		5
LOY15-001	15	267.1	-74.95	DIA		1/05/2015	6		5
LOY15-001	18	267.65	-75.11	DIA		1/05/2015	7		5
LOY15-001	21	268.04	-75.24	DIA		1/05/2015	8		5
LOY15-001	24	268.61	-75.08	DIA		1/05/2015	9		5
LOY15-001	27	268.59	-74.9	DIA		1/05/2015	10		5
LOY15-001	30	267.95	-75.25	DIA		1/05/2015	11		5
LOY15-001	33	267.45	-75.3	DIA		1/05/2015	12		5
LOY15-001	36	267.98	-75	DIA		1/05/2015	13		5
LOY15-001	39	268.77	-75.07	DIA		1/05/2015	14		5
LOY15-001	42	268.85	-75.32	DIA		1/05/2015	15		5
LOY15-001	45	269.54	-75.21	DIA		1/05/2015	16		5
LOY15-001	48	270.69	-74.98	DIA		1/05/2015	17		5
LOY15-001	51	270.42	-75.19	DIA		1/05/2015	18		5
LOY15-001	54	269.62	-75.59	DIA		1/05/2015	19		5
LOY15-001	57	270.09	-75.34	DIA		1/05/2015	20		5
LOY15-001	60	270.79	-75.09	DIA		1/05/2015	21		5
LOY15-001	63	271.06	-75.27	DIA		1/05/2015	22		5
LOY15-001	66	270.87	-75.48	DIA		1/05/2015	23		5
LOY15-001	69	269.92	-75.4	DIA		1/05/2015	24		5
LOY15-001	72	269.72	-75.14	DIA		1/05/2015	25		5
LOY15-001	75	268.48	-75.28	DIA		1/05/2015	26		5
LOY15-001	78	268.54	-75.43	DIA		1/05/2015	27		5
LOY15-001	81	268.74	-75.5	DIA		1/05/2015	28		5
LOY15-001	84	268.61	-75.44	DIA		1/05/2015	29		5
LOY15-001	87	268.15	-75.34	DIA		1/05/2015	30		5
LOY15-001	90	268.7	-74.71	DIA		1/05/2015	31		5
LOY15-001	93	268.4	-75.65	DIA		1/05/2015	32		5
LOY15-001	96	268.95	-75.58	DIA		1/05/2015	33		5
LOY15-001	99	268.67	-75.37	DIA		1/05/2015	34		5
LOY15-001	102	268.56	-75.38	DIA		1/05/2015	35		5
LOY15-001	105	268.49	-75.62	DIA		1/05/2015	36		5
LOY15-001	108	268.1	-75.58	DIA		1/05/2015	37		5
LOY15-001	111	268.29	-75.47	DIA		1/05/2015	38		5
LOY15-001	114	268.97	-75.86	DIA		1/05/2015	39		5
LOY15-001	117	269.69	-75.81	DIA		1/05/2015	40		5
LOY15-001	120	270.2	-75.76	DIA		1/05/2015	41		5
LOY15-001	123	270.2	-75.57	DIA		1/05/2015	42		5
LOY15-001	126	269.71	-75.55	DIA		1/05/2015	43		5
LOY15-001	129	269.01	-75.68	DIA		1/05/2015	44		5
LOY15-001	132	269.62	-75.78	DIA		1/05/2015	45		5
LOY15-001	135	269.56	-75.63	DIA		1/05/2015	46		5
LOY15-001	138	269.24	-75.66	DIA		1/05/2015	47		5
LOY15-001	141	269.53	-75.74	DIA		1/05/2015	48		5
LOY15-001	144	269.06	-75.81	DIA		1/05/2015	49		5
LOY15-001	147	269.42	-75.55	DIA		1/05/2015	50		5
LOY15-001	150	270.07	-75.56	DIA		1/05/2015	51		5
LOY15-001	153	269.53	-75.87	DIA		1/05/2015	52		5
LOY15-001	156	270.01	-75.77	DIA		1/05/2015	53		5
LOY15-001	159	270.62	-75.61	DIA		1/05/2015	54		5
LOY15-001	162	270.9	-75.63	DIA		1/05/2015	55		5
LOY15-001	165	270.74	-75.98	DIA		1/05/2015	56		5
LOY15-001	168	270.83	-76.14	DIA		1/05/2015	57		5
LOY15-001	171	270.86	-76.05	DIA		1/05/2015	58		5
LOY15-001	174	271.71	-75.74	DIA		1/05/2015	59		5
LOY15-001	177	272.63	-75.99	DIA		1/05/2015	60		5
LOY15-001	180	271.85	-76.17	DIA		1/05/2015	61		5

Hole_ID	Depth	Azimuth(TN)	Dip	Drill Code	Comment	Date	ID	Azimuth(Mag)	Type
LOY15-001	183	271.5	-75.97	DIA		1/05/2015	62		5
LOY15-001	186	271.28	-75.87	DIA		1/05/2015	63		5
LOY15-001	189	270.85	-76.1	DIA		1/05/2015	64		5
LOY15-001	192	271.39	-76.26	DIA		1/05/2015	65		5
LOY15-001	195	271.71	-76.2	DIA		1/05/2015	66		5
LOY15-001	198	272.07	-76.03	DIA		1/05/2015	67		5
LOY15-001	201	272.26	-76.02	DIA		1/05/2015	68		5
LOY15-001	204	272.03	-76.34	DIA		1/05/2015	69		5
LOY15-001	207	272.07	-76.27	DIA		1/05/2015	70		5
LOY15-001	210	273.49	-76.03	DIA		1/05/2015	71		5
LOY15-001	213	273.99	-76.15	DIA		1/05/2015	72		5
LOY15-001	216	273.91	-76.3	DIA		1/05/2015	73		5
LOY15-001	219	274.28	-75.89	DIA		1/05/2015	74		5
LOY15-001	222	274.09	-76.29	DIA		1/05/2015	75		5
LOY15-001	225	274.36	-76.17	DIA		1/05/2015	76		5
LOY15-001	228	274.55	-76.39	DIA		1/05/2015	77		5
LOY15-001	231	274.44	-76.56	DIA		1/05/2015	78		5
LOY15-001	234	274.96	-76.53	DIA		1/05/2015	79		5
LOY15-001	237	275.33	-76.34	DIA		1/05/2015	80		5
LOY15-001	240	275.1	-76.46	DIA		1/05/2015	81		5
LOY15-001	243	275.34	-76.63	DIA		1/05/2015	82		5
LOY15-001	246	275.85	-76.55	DIA		1/05/2015	83		5
LOY15-001	249	276.54	-76.36	DIA		1/05/2015	84		5
LOY15-001	252	276.25	-76.41	DIA		1/05/2015	85		5
LOY15-001	255	275.87	-76.65	DIA		1/05/2015	86		5
LOY15-001	258	275.68	-76.69	DIA		1/05/2015	87		5
LOY15-001	261	275.06	-76.58	DIA		1/05/2015	88		5
LOY15-001	264	275.13	-76.41	DIA		1/05/2015	89		5
LOY15-001	267	275.83	-76.71	DIA		1/05/2015	90		5
LOY15-001	270	275.28	-76.7	DIA		1/05/2015	91		5
LOY15-001	273	275.64	-76.44	DIA		1/05/2015	92		5
LOY15-001	276	275.58	-76.41	DIA		1/05/2015	93		5
LOY15-001	279	275.66	-76.59	DIA		1/05/2015	94		5
LOY15-001	282	275.47	-76.74	DIA		1/05/2015	95		5
LOY15-001	285	275.44	-76.68	DIA		1/05/2015	96		5
LOY15-001	288	275.65	-76.44	DIA		1/05/2015	97		5
LOY15-001	291	276.12	-76.48	DIA		1/05/2015	98		5
LOY15-001	294	275.23	-76.89	DIA		1/05/2015	99		5
LOY15-001	297	274.95	-76.78	DIA		1/05/2015	100		5
LOY15-001	300	275.64	-76.54	DIA		1/05/2015	101		5
LOY15-001	303	274.89	-76.84	DIA		1/05/2015	102		5
LOY15-001	306	275.21	-76.75	DIA		1/05/2015	103		5
LOY15-001	309	275.96	-76.65	DIA		1/05/2015	104		5
LOY15-001	312	275.86	-76.56	DIA		1/05/2015	105		5
LOY15-001	315	275.62	-76.85	DIA		1/05/2015	106		5
LOY15-001	318	275.88	-76.87	DIA		1/05/2015	107		5
LOY15-001	321	276.3	-76.73	DIA		1/05/2015	108		5
LOY15-001	324	276.13	-76.71	DIA		1/05/2015	109		5
LOY15-001	327	276.2	-76.98	DIA		1/05/2015	110		5
LOY15-001	330	276.8	-77.03	DIA		1/05/2015	111		5
LOY15-001	333	276.64	-76.9	DIA		1/05/2015	112		5
LOY15-001	336	278.17	-76.67	DIA		1/05/2015	113		5
LOY15-001	339	279.05	-76.88	DIA		1/05/2015	114		5
LOY15-001	342	278.8	-77.08	DIA		1/05/2015	115		5
LOY15-001	345	278.99	-76.93	DIA		1/05/2015	116		5
LOY15-001	348	279.49	-76.69	DIA		1/05/2015	117		5
LOY15-001	351	279.29	-76.83	DIA		1/05/2015	118		5
LOY15-001	354	278.54	-77.11	DIA		1/05/2015	119		5
LOY15-001	357	277.87	-76.97	DIA		1/05/2015	120		5
LOY15-001	360	278.3	-76.68	DIA		1/05/2015	121		5
LOY15-001	363	278.4	-76.85	DIA		1/05/2015	122		5

Hole_ID	Depth	Azimuth(TN)	Dip	Drill Code	Comment	Date	ID	Azimuth(Mag)	Type
LOY15-001	366	278.82	-76.96	DIA		1/05/2015	123		5
LOY15-001	369	279.97	-76.93	DIA		1/05/2015	124		5
LOY15-001	372	280.48	-76.67	DIA		1/05/2015	125		5
LOY15-001	375	281.27	-76.95	DIA		1/05/2015	126		5
LOY15-001	378	281.39	-77.2	DIA		1/05/2015	127		5
LOY15-001	381	281.46	-77.22	DIA		1/05/2015	128		5
LOY15-001	384	281.75	-77.04	DIA		1/05/2015	129		5
LOY15-001	387	282.35	-77.06	DIA		1/05/2015	130		5
LOY15-001	390	282.14	-77.25	DIA		1/05/2015	131		5
LOY15-001	393	282.74	-77.33	DIA		1/05/2015	132		5
LOY15-001	396	283.4	-77	DIA		1/05/2015	133		5
LOY15-001	399	283.65	-76.88	DIA		1/05/2015	134		5
LOY15-001	402	282.77	-77.23	DIA		1/05/2015	135		5
LOY15-001	405	282.62	-77.24	DIA		1/05/2015	136		5
LOY15-001	408	283.27	-77.02	DIA		1/05/2015	137		5
LOY15-001	411	283.83	-76.93	DIA		1/05/2015	138		5
LOY15-001	414	284.49	-77.16	DIA		1/05/2015	139		5
LOY15-001	417	283.56	-77.31	DIA		1/05/2015	140		5
LOY15-001	420	284.3	-77.16	DIA		1/05/2015	141		5
LOY15-001	423	285.11	-76.95	DIA		1/05/2015	142		5
LOY15-001	426	285.38	-77.1	DIA		1/05/2015	143		5
LOY15-001	429	285.49	-77.26	DIA		1/05/2015	144		5
LOY15-001	432	285.71	-77.18	DIA		1/05/2015	145		5
LOY15-001	435	285.53	-77.04	DIA		1/05/2015	146		5
LOY15-001	438	285.68	-77	DIA		1/05/2015	147		5
LOY15-001	441	285.07	-77.25	DIA		1/05/2015	148		5
LOY15-001	444	285.89	-77.25	DIA		1/05/2015	149		5
LOY15-001	447	286.05	-77.06	DIA		1/05/2015	150		5
LOY15-001	450	285.48	-77.11	DIA		1/05/2015	151		5
LOY15-001	453	285.46	-77.35	DIA		1/05/2015	152		5
LOY15-001	456	285.78	-77.34	DIA		1/05/2015	153		5
LOY15-001	459	285.88	-77.4	DIA		1/05/2015	154		5
LOY15-001	462	285.72	-77.23	DIA		1/05/2015	155		5
LOY15-001	465	286.37	-77.33	DIA		1/05/2015	156		5
LOY15-001	468	286.59	-77.13	DIA		1/05/2015	157		5
LOY15-001	471	286.43	-77.12	DIA		1/05/2015	158		5
LOY15-001	474	286.68	-77.36	DIA		1/05/2015	159		5
LOY15-001	477	287.18	-77.28	DIA		1/05/2015	160		5
LOY15-001	480	287.72	-77.2	DIA		1/05/2015	161		5
LOY15-001	483	288.08	-77.1	DIA		1/05/2015	162		5
LOY15-001	486	287.56	-77.36	DIA		1/05/2015	163		5
LOY15-001	490	287.96	-77.44	DIA		1/05/2015	164		5

Hole_ID	At(m)	Core angle (LCA)	Structure_ Code	Comments	Azimuth (True)	Dip	Dip_Direction	Struc_ID	Beta Angle	Lineation_ Alpha
LOY15-001	12	27	Vn	Cb veinlets						
LOY15-001	55	37	Vn	interval 53 to 84.7m with commonly 2mm 37LCA Cb veins						
LOY15-001	116	33	Vn	commonly 2mm 33LCA Cb veins						
LOY15-001	120	10	Vn	1mm Cb vns						
LOY15-001	143.3	21	Bd	S0	210	55	300	1		
LOY15-001	146.05		Bd	S0? Poor reading	190	60	280	1		
LOY15-001	251.2	40	Bd	S0?	260	52	350	1		
LOY15-001	269.7	30	Bd	S0 calc-sil altn on lam bdd	190	46	280	1		
LOY15-001	269.8	47	Fr	weakly undulating fracture	50	58	140			
LOY15-001	270.25	33	Fr	planar frac with gn serp?+cb, S0 parallel?	200	42	290			
LOY15-001	270.3	27	Bd	S0 lam bdd	183	54	273	1		
LOY15-001	270.36	32	Vn	4mm cb vn	30	73	120			
LOY15-001	338.6	51	Vn	1mm crm sil vn	90	43	0			
LOY15-001	339.1	45	Fr	crm clay fill on irregular stepped frac	230	40	320			
LOY15-001	339.2	25	Bd	S0 weakly undulating (monocline)	265	58	355	1		
LOY15-001	350.45	30	Bd	S0 laminated bedding	275	53	185	1		
LOY15-001	350.45	30	Vn	5mm carb vein, S0 parallel	275	53	185			
LOY15-001	394.8	49	Vn	4mm crm silica vein - euhedral dss py	325	40	235			
LOY15-001	394.85	65	Vn	2mm cream silica vein, diffuse edged	125	32	215			
LOY15-001	425.5	65	Fr	undulating fracture	35	33	125			
LOY15-001	425.65	15	Fr	pgn slightly soapy clay filled fracture; S0 parallel? In oolitic lmst	93	74	3			
LOY15-001	452.2	20	Bd	S0 dark grey shale interbed	115	72	25	1		
LOY15-001	452.3	50	Ft	microfault (soft sediment deformation?), S0 offset 1cm	70	35	160			
LOY15-001	452.56	65	Vn	2mm cream silica vein, diffuse edged	70	35	160			
LOY15-001	452.75	47	Vn	2mm cream silica vein, diffuse edged	100	34	190			
LOY15-001	476.25	13	Bd	bedding S0	100	79	10	1		
LOY15-001	476.3	57	Fr	fracture, undulating	125	11	35			

Hole_id	Sample_ID	from	to	Sample_type	Batch_Number	Sample_Type2	Recvd Wt.	Au	Ag	Al	As
Units		metres	metres				kg	ppm	ppm	%	ppm
Assay_code							WEI-21	Au-AA25	ME-MS61	ME-MS61	ME-MS61
Lower_detection_limit							0.02	0.01	0.01	0.01	0.2
Accuracy											
Upper_detection_limit											
Assay_company							Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.
LOY15-001	S.Poke 1	66.7	67.7	drill core	BU15053200	half core	3.88	0.01	0.28	6.98	1.1
LOY15-001	S.Poke 2	149.3	150.3	drill core	BU15053200	half core	2.21	<0.01	0.02	1.28	<0.2
LOY15-001	S.Poke 3	399.8	400.8	drill core	BU15053200	half core	1.84	<0.01	0.04	0.7	<0.2
LOY15-001	4	284.5	285.5	drill core	BU15063560	half core	2.34	0.01	0.06	1.92	<0.2
LOY15-001	5	285.5	286.5	drill core	BU15063560	half core	2.07	<0.01	0.04	1.26	<0.2
LOY15-001	6	286.5	287.5	drill core	BU15063560	half core	1.87	<0.01	0.08	1.35	2.5

Hole_id	Sample_ID	from	to	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
Units		metres	metres	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Assay_code				ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
Lower_detection_limit				10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05
Accuracy												
Upper_detection_limit												
Assay_company				Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.
LOY15-001	S.Poke 1	66.7	67.7	360	3.48	0.02	5.64	0.08	133	45.6	117	0.28
LOY15-001	S.Poke 2	149.3	150.3	90	0.65	0.09	28.6	<0.02	20.5	2.7	17	1.25
LOY15-001	S.Poke 3	399.8	400.8	30	0.3	0.48	26.2	3.85	9.2	1.7	9	0.68
LOY15-001	4	284.5	285.5	150	0.63	0.12	25.6	0.1	39.9	3.2	24	2.22
LOY15-001	5	285.5	286.5	150	1.18	0.08	27.1	0.09	33.8	1.8	19	2.93
LOY15-001	6	286.5	287.5	110	1.36	0.25	27.7	0.3	24.9	2.2	20	2.52

Hole_id	Sample_ID	from	to	Cu	Fe	Ga	Ge	Hf	In	K	La	Li
Units		metres	metres	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
Assay_code				ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
Lower_detection_limit				0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2
Accuracy												
Upper_detection_limit												
Assay_company				Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.
LOY15-001	S.Poke 1	66.7	67.7	39.3	9.68	25.3	0.43	7.8	0.08	2.16	63.5	11.3
LOY15-001	S.Poke 2	149.3	150.3	7	0.74	2.78	0.05	0.9	0.011	0.87	9.6	9.3
LOY15-001	S.Poke 3	399.8	400.8	4.6	0.63	1.67	<0.05	0.5	0.01	0.35	4.4	5.5
LOY15-001	4	284.5	285.5	9.5	0.72	5.19	0.09	2.1	0.018	1.23	19.4	17.3
LOY15-001	5	285.5	286.5	5.7	0.91	3.13	0.07	1.7	0.014	0.84	16.4	13.7
LOY15-001	6	286.5	287.5	6.5	1.06	3.74	0.07	1.1	0.017	0.88	12.4	12.5

Hole_id	Sample_ID	from	to	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb
Units		metres	metres	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Assay_code				ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
Lower_detection_limit				0.01	5	0.05	0.01	0.1	0.2	10	0.5	0.1
Accuracy												
Upper_detection_limit												
Assay_company				Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.
LOY15-001	S.Poke 1	66.7	67.7	4.39	1280	6.51	4.16	78.2	121.5	5190	3.9	25.6
LOY15-001	S.Poke 2	149.3	150.3	1.02	133	0.13	0.26	2.8	5.8	150	4.5	33
LOY15-001	S.Poke 3	399.8	400.8	7.13	124	0.14	0.02	1.6	4	100	76.6	14.4
LOY15-001	4	284.5	285.5	1.86	140	0.38	0.31	5.7	8.2	180	23.9	45.2
LOY15-001	5	285.5	286.5	1.67	175	0.15	0.16	4.1	3.7	110	16.5	31.9
LOY15-001	6	286.5	287.5	1.82	392	0.23	0.09	3.5	4.7	210	58.8	31.5

Hole_id	Sample_ID	from	to	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
Units		metres	metres	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Assay_code				ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
Lower_detection_limit				0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05
Accuracy												
Upper_detection_limit												
Assay_company				Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.
LOY15-001	S.Poke 1	66.7	67.7	<0.002	0.02	0.16	9.8	2	2.9	1425	4.43	0.07
LOY15-001	S.Poke 2	149.3	150.3	<0.002	0.5	0.11	2.5	<1	0.7	504	0.21	<0.05
LOY15-001	S.Poke 3	399.8	400.8	<0.002	0.26	0.53	1.5	<1	0.4	264	0.11	<0.05
LOY15-001	4	284.5	285.5	<0.002	0.16	0.37	4	<1	1.1	316	0.43	<0.05
LOY15-001	5	285.5	286.5	<0.002	0.06	0.18	2.7	<1	0.7	391	0.31	<0.05
LOY15-001	6	286.5	287.5	<0.002	0.08	0.38	2.9	<1	0.9	354	0.26	<0.05

Hole_id	Sample_ID	from	to	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Units		metres	metres	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Assay_code				ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
Lower_detection_limit				0.2	0.005	0.02	0.1	1	0.1	0.1	2	0.5
Accuracy												
Upper_detection_limit												
Assay_company				Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.	Australian Laboratory Services Pty. Ltd.
LOY15-001	S.Poke 1	66.7	67.7	6	1.525	0.04	2.2	145	0.5	19.6	155	372
LOY15-001	S.Poke 2	149.3	150.3	3.7	0.094	0.15	0.8	15	0.3	6.9	9	29.9
LOY15-001	S.Poke 3	399.8	400.8	2	0.049	0.08	0.8	9	0.3	3.2	547	17.5
LOY15-001	4	284.5	285.5	7.8	0.168	0.26	1.8	23	1.3	14.1	15	72.5
LOY15-001	5	285.5	286.5	6.1	0.122	0.18	1.7	17	0.5	12	15	58.3
LOY15-001	6	286.5	287.5	4.4	0.107	0.13	1.1	18	0.8	9.3	33	37.3

Hole_ID	From	To	Interval	Measured	Recovery%	Lengths>10cm	RQD %
LOY15-001	0	2.4	2.4	2.4	100%	0.11	4.58
LOY15-001	2.4	5.6	3.2	2.9	91%	2.9	90.63
LOY15-001	5.6	8.6	3	3	100%	1.6	53.33
LOY15-001	8.6	11	2.4	2.3	96%	0.2	8.33
LOY15-001	11	14.1	3.1	3.1	100%	0.14	4.52
LOY15-001	14.1	14.6	0.5	0.45	90%	0	0.00
LOY15-001	14.6	17	2.4	2.4	100%	0.35	14.58
LOY15-001	17	17.9	0.9	0.9	100%	0	0.00
LOY15-001	17.9	19.9	2	2	100%	1.2	60.00
LOY15-001	19.9	21.6	1.7	1.7	100%	0.3	17.65
LOY15-001	21.6	23.6	2	2.1	105%	0	0.00
LOY15-001	23.6	26.1	2.5	2.4	96%	0.4	16.00
LOY15-001	26.1	29.4	3.3	3.1	94%	0	0.00
LOY15-001	29.4	32.4	3	3.1	103%	0.4	13.33
LOY15-001	32.4	35.5	3.1	3.1	100%	0.6	19.35
LOY15-001	35.5	37.9	2.4	2.3	96%	1	41.67
LOY15-001	37.9	41.4	3.5	3.1	89%	1.5	42.86
LOY15-001	41.4	43.6	2.2	2.1	95%	1.1	50.00
LOY15-001	43.6	45	1.4	1.4	100%	0.5	35.71
LOY15-001	45	47.6	2.6	2.6	100%	1.4	53.85
LOY15-001	47.6	50.6	3	2.9	97%	0.9	30.00
LOY15-001	50.6	53.3	2.7	2.7	100%	1.4	51.85
LOY15-001	53.3	56.6	3.3	3.1	94%	1.6	48.48
LOY15-001	56.6	59.6	3	3	100%	1	33.33
LOY15-001	59.6	62.6	3	2.9	97%	1.8	60.00
LOY15-001	62.6	65.2	2.6	2.5	96%	1.1	42.31
LOY15-001	65.2	68	2.8	2.6	93%	1.1	39.29
LOY15-001	68	69.4	1.4	1.4	100%	0.6	42.86
LOY15-001	69.4	70.6	1.2	1.2	100%	0.7	58.33
LOY15-001	70.6	73.7	3.1	3	97%	2.5	80.65
LOY15-001	73.7	76.8	3.1	3	97%	2	64.52
LOY15-001	76.8	79.8	3	2.9	97%	1.5	50.00
LOY15-001	79.8	83.6	3.8	3.8	100%	1.9	50.00
LOY15-001	83.6	85.8	2.2	2.1	95%	0.9	40.91
LOY15-001	85.8	89.6	3.8	3.8	100%	0	0.00
LOY15-001	89.6	92.3	2.7	2.7	100%	0.2	7.41
LOY15-001	92.3	95.6	3.3	3.4	103%	0.6	18.18
LOY15-001	95.6	98.6	3	3	100%	0.85	28.33
LOY15-001	98.6	101.4	2.8	2.8	100%	1.2	42.86
LOY15-001	101.4	104.5	3.1	3	97%	2.2	70.97
LOY15-001	104.5	106.6	2.1	2	95%	1.2	57.14
LOY15-001	106.6	110	3.4	3.4	100%	1.5	44.12
LOY15-001	110	113	3	3	100%	1.7	56.67
LOY15-001	113	115.7	2.7	2.9	107%	0.8	29.63
LOY15-001	115.7	116.5	0.8	0.8	100%	0.8	100.00
LOY15-001	116.5	119.3	2.8	2.1	75%	0.15	5.36
LOY15-001	119.3	122.3	3	3.2	107%	0.6	20.00
LOY15-001	122.3	125.1	2.8	2.8	100%	1.3	46.43
LOY15-001	125.1	128	2.9	2.9	100%	1.3	44.83
LOY15-001	128	131.5	3.5	3.6	103%	2.8	80.00
LOY15-001	131.5	133.9	2.4	2.4	100%	1	41.67
LOY15-001	133.9	135.5	1.6	1.3	81%	0.4	25.00
LOY15-001	135.5	137.5	2	2	100%	1.2	60.00
LOY15-001	137.5	137.7	0.2	0	0%	0	0.00
LOY15-001	137.7	140	2.3	1.9	83%	0.7	30.43

Hole_ID	From	To	Interval	Measured	Recovery%	Lengths>10cm	RQD %
LOY15-001	140	143.5	3.5	3.3	94%	3	85.71
LOY15-001	143.5	146.5	3	3	100%	2.7	90.00
LOY15-001	146.5	148.7	2.2	2.2	100%	1.4	63.64
LOY15-001	148.7	152.5	3.8	3.7	97%	3.1	81.58
LOY15-001	152.5	154.9	2.4	2.3	96%	2	83.33
LOY15-001	154.9	157.7	2.8	2.6	93%	2.1	75.00
LOY15-001	157.5	160.8	3.3	2.9	88%	2.7	81.82
LOY15-001	160.8	163.9	3.1	3.1	100%	2.2	70.97
LOY15-001	163.9	167.9	4	3.6	90%	2.6	65.00
LOY15-001	167.5	170.5	3	2.8	93%	1.9	63.33
LOY15-001	170.5	171.2	0.7	0.6	86%	0.2	28.57
LOY15-001	171.2	173.3	2.1	2	95%	1.2	57.14
LOY15-001	173.3	176.5	3.2	3.4	106%	1.3	40.63
LOY15-001	176.5	179.2	2.7	2.3	85%	0.3	11.11
LOY15-001	179.2	182.1	2.9	1.2	41%	0.2	6.90
LOY15-001	182.1	185.2	3.1	2.5	81%	1	32.26
LOY15-001	185.2	188.1	2.9	1.8	62%	0.6	20.69
LOY15-001	188.1	191	2.9	1.5	52%	0.5	17.24
LOY15-001	191	193.6	2.6	1.9	73%	1.3	50.00
LOY15-001	193.6	196.7	3.1	3.1	100%	2.5	80.65
LOY15-001	196.7	200	3.3	3.4	103%	1.8	54.55
LOY15-001	200	202.8	2.8	2	71%	1.8	64.29
LOY15-001	202.8	206.8	4	4.1	103%	1.5	37.50
LOY15-001	206.8	209.5	2.7	2.6	96%	2.6	96.30
LOY15-001	209.5	212.5	3	2.8	93%	2.6	86.67
LOY15-001	212.5	215.4	2.9	2.8	97%	2.1	72.41
LOY15-001	215.4	218.5	3.1	3.1	100%	2.7	87.10
LOY15-001	218.5	221.5	3	3.1	103%	2.2	73.33
LOY15-001	221.5	224.5	3	2.6	87%	2.3	76.67
LOY15-001	224.5	226.8	2.3	2.4	104%	1.3	56.52
LOY15-001	226.8	230.5	3.7	3.3	89%	1.1	29.73
LOY15-001	230.5	232.9	2.4	2.3	96%	1.6	66.67
LOY15-001	232.9	235.7	2.8	2.7	96%	0.7	25.00
LOY15-001	235.7	239	3.3	2.7	82%	0.5	15.15
LOY15-001	239	242	3	2.8	93%	0.5	16.67
LOY15-001	242	243.4	1.4	1.4	100%	0.8	57.14
LOY15-001	243.4	245.6	2.2	2.2	100%	1.4	63.64
LOY15-001	245.6	248.1	2.5	2.2	88%	1.175	47.00
LOY15-001	248.1	251.5	3.4	3.3	97%	3.3	97.06
LOY15-001	251.5	254.5	3	2.9	97%	2.8	93.33
LOY15-001	254.5	257.5	3	2.9	97%	2.8	93.33
LOY15-001	257.5	260.5	3	3	100%	3	100.00
LOY15-001	260.5	263.1	2.6	2.5	96%	1.8	69.23
LOY15-001	263.1	264.5	1.4	1.2	86%	1.1	78.57
LOY15-001	264.5	266.5	2	2	100%	1.9	95.00
LOY15-001	266.5	269.5	3	3	100%	2.9	96.67
LOY15-001	269.5	272.3	2.8	2.8	100%	2.5	89.29
LOY15-001	272.3	275.5	3.2	3.1	97%	3.1	96.88
LOY15-001	275.5	277.9	2.4	2.4	100%	2.1	87.50
LOY15-001	277.9	279.4	1.5	1.6	107%	1.1	73.33
LOY15-001	279.4	281.9	2.5	2.4	96%	2.1	84.00
LOY15-001	281.9	284.5	2.6	2.6	100%	2.3	88.46
LOY15-001	284.5	286.9	2.4	2.5	104%	1.4	58.33
LOY15-001	286.9	290.5	3.6	3.7	103%	2.4	66.67
LOY15-001	290.5	293.5	3	3	100%	2.4	80.00

Hole_ID	From	To	Interval	Measured	Recovery%	Lengths>10cm	RQD %
LOY15-001	293.5	296.5	3	3	100%	2.5	83.33
LOY15-001	296.5	299.5	3	2.9	97%	2.9	96.67
LOY15-001	299.5	302.5	3	2.9	97%	2.7	90.00
LOY15-001	302.5	305.5	3	3	100%	3	100.00
LOY15-001	305.5	308.5	3	3	100%	3	100.00
LOY15-001	308.5	311.5	3	3.1	103%	3.1	103.33
LOY15-001	311.5	314.5	3	3	100%	2.9	96.67
LOY15-001	314.5	316.8	2.3	2.3	100%	1.5	65.22
LOY15-001	316.8	319.9	3.1	3.1	100%	3	96.77
LOY15-001	319.9	323	3.1	3.1	100%	3.1	100.00
LOY15-001	323	326	3	3.2	107%	2.3	76.67
LOY15-001	326	329.1	3.1	3	97%	3	96.77
LOY15-001	329.1	332.1	3	3.1	103%	3.1	103.33
LOY15-001	332.1	335.5	3.4	3.4	100%	3.2	94.12
LOY15-001	335.1	338.5	3.4	3.2	94%	3.2	94.12
LOY15-001	338.5	341.5	3	2.9	97%	2.5	83.33
LOY15-001	341.5	344.5	3	3	100%	3	100.00
LOY15-001	344.5	347.5	3	2.9	97%	2.9	96.67
LOY15-001	347.5	350.5	3	3	100%	2.9	96.67
LOY15-001	350.5	353.5	3	3.1	103%	2.3	76.67
LOY15-001	353.5	356.5	3	2.9	97%	2.9	96.67
LOY15-001	356.5	359.5	3	3	100%	3	100.00
LOY15-001	359.5	362.5	3	3	100%	3	100.00
LOY15-001	362.5	365.5	3	3	100%	3	100.00
LOY15-001	365.5	368.5	3	3	100%	2.9	96.67
LOY15-001	368.5	371.5	3	3.1	103%	3.1	103.33
LOY15-001	371.5	374.5	3	3	100%	3	100.00
LOY15-001	374.5	377.5	3	3.1	103%	2.2	73.33
LOY15-001	377.5	379.5	2	2.1	105%	0.85	42.50
LOY15-001	379.5	383.3	3.8	2.4	63%	0.65	17.11
LOY15-001	383.3	385.5	2.2	2	91%	0.7	31.82
LOY15-001	385.5	388.6	3.1	3.1	100%	2.8	90.32
LOY15-001	388.6	391.7	3.1	3.1	100%	3.1	100.00
LOY15-001	391.7	394.8	3.1	3.1	100%	3.1	100.00
LOY15-001	394.8	397.9	3.1	3	97%	3	96.77
LOY15-001	397.9	401	3.1	3.1	100%	3.1	100.00
LOY15-001	401	404.01	3.01	3.1	103%	3.1	102.99
LOY15-001	404.01	407.2	3.19	3.1	97%	3.1	97.18
LOY15-001	407.2	410.3	3.1	3	97%	3	96.77
LOY15-001	410.3	413.4	3.1	3	97%	3	96.77
LOY15-001	413.4	416.5	3.1	3.1	100%	3.1	100.00
LOY15-001	416.5	419.5	3	3.1	103%	3	100.00
LOY15-001	419.5	422.5	3	3	100%	3	100.00
LOY15-001	422.5	425.5	3	2.9	97%	2.7	90.00
LOY15-001	425.5	428.5	3	3	100%	3	100.00
LOY15-001	428.5	431.5	3	3.1	103%	3.1	103.33
LOY15-001	431.5	434.5	3	3	100%	3	100.00
LOY15-001	434.5	437.5	3	3	100%	3	100.00
LOY15-001	437.5	440.5	3	3	100%	2.9	96.67
LOY15-001	440.5	443.2	2.7	2.5	93%	1.7	62.96
LOY15-001	443.2	446.3	3.1	3.1	100%	2.6	83.87
LOY15-001	446.3	449.4	3.1	3	97%	3	96.77
LOY15-001	449.4	452.5	3.1	2.9	94%	2.8	90.32
LOY15-001	452.5	455.5	3	3	100%	3	100.00
LOY15-001	455.5	458.4	2.9	2.9	100%	2.2	75.86

DH_Geotech

Hole_ID	From	To	Interval	Measured	Recovery%	Lengths>10cm	RQD %
LOY15-001	458.5	461.5	3	3	100%	3.3	110.00
LOY15-001	461.5	464	2.5	2.5	100%	1.8	72.00
LOY15-001	464	467	3	3	100%	1.9	63.33
LOY15-001	467	470.1	3.1	3.1	100%	2	64.52
LOY15-001	470.1	473.2	3.1	3	97%	3	96.77
LOY15-001	473.2	476.3	3.1	3.1	100%	2.9	93.55
LOY15-001	476.3	479.4	3.1	3	97%	3	96.77
LOY15-001	479.4	482.5	3.1	3.2	103%	3.2	103.23
LOY15-001	482.5	485.5	3	3.1	103%	2.85	95.00
LOY15-001	485.5	488.5	3	3.1	103%	3.1	103.33
LOY15-001	488.5	491.5	3	3.1	103%	3.1	103.33
LOY15-001	491.5	494.5	3	3.1	103%	3.1	103.33
LOY15-001	494.5	497.5	3	3.1	103%	2.83	94.33
LOY15-001	497.5	500	2.5	2.4	96%	2.4	96.00

Hole_ID	From	To	Interval	MagSus (SI)	Peak MagSus (SI)	Number Readings	Comment
LOY15-001	0	2.4	2.4	5.63		3	
LOY15-001	2.4	5.6	3.2	9.54		3	
LOY15-001	5.6	8.6	3	8.45		3	
LOY15-001	8.6	11	2.4	8.7		3	
LOY15-001	11	14.1	3.1	9.35		3	
LOY15-001	14.1	17.9	3.8	7.26		3	
LOY15-001	17.9	21.6	3.7	9.95		3	
LOY15-001	21.6	26.1	4.5	8.76		3	
LOY15-001	26.1	29.4	3.3	9.83		3	
LOY15-001	29.4	32.4	3	8.8		3	
LOY15-001	32.4	35.5	3.1	8.14		3	
LOY15-001	35.5	37.9	2.4	7.82		3	
LOY15-001	37.9	41.4	3.5	11		3	
LOY15-001	41.4	43.6	2.2	10.8		3	
LOY15-001	45	47.6	2.6	9.3		3	
LOY15-001	47.6	50.6	3	10.8		3	
LOY15-001	50.6	53.3	2.7	10.5		3	
LOY15-001	53.3	56.6	3.3	8.26		3	
LOY15-001	56.6	59.6	3	12.1		3	
LOY15-001	59.6	62.6	3	12.2		3	
LOY15-001	62.6	65.2	2.6	12.4		3	
LOY15-001	65.2	68	2.8	11.3		3	
LOY15-001	68	70.6	2.6	11.6		3	
LOY15-001	70.6	73.7	3.1	9.77		3	
LOY15-001	73.7	76.8	3.1	11.6		3	
LOY15-001	76.8	79.8	3	9.13		3	
LOY15-001	79.8	83.6	3.8	9.13		3	
LOY15-001	83.6	85.8	2.2	2.36		3	
LOY15-001	85.8	89.6	3.8	10.9		3	
LOY15-001	89.6	98.6	9	9.31		3	
LOY15-001	98.6	101.4	2.8	9.85		3	
LOY15-001	101.4	104.5	3.1	9.98		3	
LOY15-001	104.5	106.6	2.1	9.81		3	
LOY15-001	106.6	110	3.4	10.1		3	
LOY15-001	110	113	3	9.76		3	
LOY15-001	113	115.7	2.7	7.83		3	
LOY15-001	115.7	116.5	0.8	6.49		3	
LOY15-001	116.5	119.3	2.8	0.42		3	
LOY15-001	119.3	122.3	3	0.04		3	
LOY15-001	122.3	125.1	2.8	0.05		3	
LOY15-001	125.1	128	2.9	0.15		3	
LOY15-001	128	131.5	3.5	0.07		3	
LOY15-001	131.5	133.9	2.4	0.19		3	
LOY15-001	133.9	137.7	3.8	0.08		3	
LOY15-001	137.7	140	2.3	0.02		3	
LOY15-001	140	143.5	3.5	0.02		3	
LOY15-001	143.5	146.5	3	0.07		3	
LOY15-001	146.5	148.7	2.2	0.28		3	
LOY15-001	148.7	152.5	3.8	0.02		3	
LOY15-001	152.5	154.9	2.4	0.05		3	
LOY15-001	154.9	157.7	2.8	0.05		3	
LOY15-001	157.5	160.8	3.3	0.03		3	
LOY15-001	160.8	163.9	3.1	0.14		3	
LOY15-001	163.9	167.9	4	0.19		3	
LOY15-001	167.5	170.5	3	0.1		3	
LOY15-001	170.5	171.2	0.7	0.1		3	

Hole_ID	From	To	Interval	MagSus (SI)	Peak MagSus (SI)	Number Readings	Comment
LOY15-001	171.2	179.2	8	0.05		3	
LOY15-001	179.2	182.1	2.9	0.27		3	
LOY15-001	182.1	185.2	3.1	0.66		3	
LOY15-001	185.2	191	5.8	0.34		3	
LOY15-001	191	193.6	2.6	0.05		3	
LOY15-001	193.6	196.7	3.1	0		3	
LOY15-001	196.7	200	3.3	0.2		3	
LOY15-001	200	202.8	2.8	0.4		3	
LOY15-001	202.8	206.8	4	0.17		3	
LOY15-001	206.8	209.5	2.7	0.34		3	
LOY15-001	209.5	212.5	3	0.47		3	
LOY15-001	212.5	215.4	2.9	0.08		3	
LOY15-001	215.4	218.5	3.1	0.07		3	
LOY15-001	218.5	221.5	3	0.15		3	
LOY15-001	221.5	224.5	3	0.13		3	
LOY15-001	224.5	226.8	2.3	0.23		3	
LOY15-001	226.8	235.7	8.9	0.01		3	
LOY15-001	235.7	239	3.3	0.21		3	
LOY15-001	239	242	3	0.7		3	
LOY15-001	242	245.6	3.6	0.23		3	
LOY15-001	245.6	248.1	2.5	0.23		3	
LOY15-001	248.1	251.5	3.4	0.2		3	
LOY15-001	251.5	254.5	3	0.12		3	
LOY15-001	254.5	257.5	3	0.022		3	
LOY15-001	257.5	260.5	3	0.06		3	
LOY15-001	260.5	263.1	2.6	0.4		3	
LOY15-001	263.1	266.5	3.4	0.2		3	
LOY15-001	266.5	269.5	3	0.07		3	
LOY15-001	269.5	272.3	2.8	0.1		3	
LOY15-001	272.3	275.5	3.2	0.23		3	
LOY15-001	275.5	277.9	2.4	0.16		3	
LOY15-001	277.9	279.4	1.5	0.22		3	
LOY15-001	279.4	281.9	2.5	0.08		3	
LOY15-001	281.9	284.5	2.6	0.12		3	
LOY15-001	284.5	286.9	2.4	0.01		3	
LOY15-001	286.9	290.5	3.6	0.15		3	
LOY15-001	290.5	293.5	3	0.34		3	
LOY15-001	293.5	296.5	3	0.1		3	
LOY15-001	296.5	299.5	3	0.06		3	
LOY15-001	299.5	302.5	3	0		3	
LOY15-001	302.5	305.5	3	0.42		3	
LOY15-001	305.5	308.5	3	0.39		3	
LOY15-001	308.5	311.5	3	0.07		3	
LOY15-001	311.5	314.5	3	0.19		3	
LOY15-001	314.5	316.8	2.3	0.01		3	
LOY15-001	316.8	319.9	3.1	0.18		3	
LOY15-001	319.9	323	3.1	0.18		3	
LOY15-001	323	326	3	0.35		3	
LOY15-001	326	329.1	3.1	0.05		3	
LOY15-001	329.1	332.1	3	0.28		3	
LOY15-001	332.1	335.5	3.4	0.02		3	
LOY15-001	335.1	338.5	3.4	0.28		3	
LOY15-001	338.5	341.5	3	0.31		3	
LOY15-001	341.5	344.5	3	0.16		3	
LOY15-001	344.5	347.5	3	0.24		3	
LOY15-001	347.5	350.5	3	0.04		3	

Hole_ID	From	To	Interval	MagSus (SI)	Peak MagSus (SI)	Number Readings	Comment
LOY15-001	350.5	356.5	6	0.06		3	
LOY15-001	356.5	359.5	3	0.06		3	
LOY15-001	359.5	362.5	3	0.02		3	
LOY15-001	362.5	365.5	3	0.19		3	
LOY15-001	365.5	368.5	3	0.45		3	
LOY15-001	368.5	371.5	3	0.19		3	
LOY15-001	371.5	374.5	3	0.16		3	
LOY15-001	374.5	377.5	3	0.08		3	
LOY15-001	377.5	379.5	2	0.22		3	
LOY15-001	379.5	383.3	3.8	0.09		3	
LOY15-001	383.3	385.5	2.2	0.14		3	
LOY15-001	385.5	388.6	3.1	0		3	
LOY15-001	388.6	391.7	3.1	0.36		3	
LOY15-001	391.7	394.8	3.1	0.28		3	
LOY15-001	394.8	397.9	3.1	0.3		3	
LOY15-001	397.9	401	3.1	0.04		3	
LOY15-001	401	404.01	3.01	0.06		3	
LOY15-001	404.01	407.2	3.19	0.32		3	
LOY15-001	407.2	410.3	3.1	0.08		3	
LOY15-001	410.3	413.4	3.1	0.36		3	
LOY15-001	413.4	416.5	3.1	0.27		3	
LOY15-001	416.5	419.5	3	0.27		3	
LOY15-001	419.5	422.5	3	0.25		3	
LOY15-001	422.5	425.5	3	0.23		3	
LOY15-001	425.5	428.5	3	0.53		3	
LOY15-001	428.5	431.5	3	0.26		3	
LOY15-001	431.5	434.5	3	0.26		3	
LOY15-001	434.5	437.5	3	0.06		3	
LOY15-001	437.5	440.5	3	0.34		3	
LOY15-001	440.5	443.2	2.7	0.07		3	
LOY15-001	443.2	446.3	3.1	0.2		3	
LOY15-001	446.3	449.4	3.1	0.24		3	
LOY15-001	449.4	452.5	3.1	0.13		3	
LOY15-001	452.5	455.5	3	0.07		3	
LOY15-001	455.5	458.4	2.9	0.08		3	
LOY15-001	458.5	461.5	3	0.04		3	
LOY15-001	461.5	464	2.5	0.31		3	
LOY15-001	464	467	3	0.08		3	
LOY15-001	467	470.1	3.1	0.07		3	
LOY15-001	470.1	473.2	3.1	0.04		3	
LOY15-001	473.2	476.3	3.1	0.17		3	
LOY15-001	476.3	479.4	3.1	0.09		3	
LOY15-001	479.4	482.5	3.1	0.15		3	
LOY15-001	482.5	485.5	3	0.06		3	
LOY15-001	485.5	488.5	3	0		3	
LOY15-001	488.5	491.5	3	0.28		3	
LOY15-001	491.5	494.5	3	0.08		3	
LOY15-001	494.5	497.5	3	0.09		3	
LOY15-001	497.5	500	2.5	0.17		3	

Lithology CODE	Lithology Description	
CFIL	Undifferentiated fill eg: drill pad/road rubble	
CLOS	Core loss - no lithology	
CELUV	Elluvium	
KANGA	Kanga	
CGOSS	Gossan !	
FCLAY	ferruginous clay	
FALT	Fault	
TFBX	Fault breccia	
TFS	Fault Shear	
TCATA	Cataclasite	
TMYO	Myolinite	
TFG	Fault gouge	
SSHALE	shale (includes carbonaceous/graphitic fine layered sediments	
SMDST	mudstone	
SSILT	siltstone	
SSHSST	Interbedded Shale and Sandstone	
SSAND	sandstone - grain size not measured	
SCONG	conglomerate - grainsize not measured	
SGWAC	greywacke	
SFSAND	Fine sandstone (0.06-0.25mm)	
SMSAND	Medium sandstone (0.25-0.5mm)	
SCSAND	Coarse sandstone (0.5-2mm)	
SFBSAND	Fine sandstone (0.06-0.25mm), commonly thin bedded	
OSKARN	Skarn	
SKVN	Skarn dominated veining with calc-silicate, commonly mag selvages	
GAR	garnet dominated skarn	
CALSVN	calc-sil dominated veining with minor skarn vein centres	
MAG	semi-pervassive to massive magnetite replacement	
MAGB	banded / veined magnetite replacement	
MAGVN	magnetite veining on fractures	
HORN	Hornfelsing	
CALS	Calc-silicate replacement (commonly amphibole dominated - trm/act-qtz-cal-dol)	
CSP	Calc-Silicate/ Skarn (pyroxene dominated - cpx-qtz-cal-dol-wol-ves-gnt-mnt)	
SKARN	Skarn alteration (eg: diopside-Garnet)	
GREISEN	Greisenisation (eg: flourite, beryl, topaz, sericite etc)	
HEM	Hematisation	
SER	Serpentinisation	
QVN	Quartz veining	
SQV	sulphide-bearing quartz vein	
SiSX	pervasive silica - sulphide	
MSSX	massive sulphide	
SMSX	semi-massive sulphide	
DSX	Disseminated sulphides	
Ch	chlorite	
Ser	sericite	
Sil	silica - pervassive	
SILI	Intense silicifiation	
KSP	Potassic (kspar dominated- bio-ser-act-kspar-qtz-mag-cpx)	
Fuc	Fuchsite	

Cb	Carbonate	
OX	Oxidised, including FeO	
Phyl	Phyllic (qtz-ser-py-fpr-ch-and-corr-kfp)	
Prop	Propylitic (epd-cb-chl-mag-sme-sil-zeo-ill-alb-adu)	
Arg	Argillic (ch-all-sme-cb-qtz-kao-dic-dia-ill)	
KBI	Potassic (biotite dominated - bio-ser-act-kfp-qtz-mag-cpx)	
KSE	Potassic (sericite dominated - bio-ser-act-kfp-qtz-mag-cpx)	
ADA	Advanced Argillic (qtz-all-and-cor-py-dia-mic)	
ODP	Mill breccia, "pebble dyke"	
ODF	Felsic dyke	
ODM	Mafic dyke	
FP	Fluidised Porphyry	
OVEIN	Vein	
OHBX	Hydrothermal breccia	
BX	Breccia	
CSOILA	A horizon soil	
CSOILB	B horizon soil	
CAEOL	Aeolian	
CHRD	Hardpan	
CFCT	Ferricrete	
CCCT	Calcrete	
CSCT	Silcrete	
CALUV	Alluvium	
CCOL	Colluvium	
SUCHEM	sedimentary undifferntiated chemical	
SGRANSAND	Granule sandstone - max detrital qtz grains 2-4mm	
SGRANCONG	Granule conglomerate >50% 2-4mm grains/clasts	
SPEBSAND	Pebble sandstone - max detrital qtz grains 4-64mm	
SPEBCONG	Pebble conglomerate >50% 4-64mm clasts	
SCOBCONG	Cobble conglomerate clasts > 64mm commonly present	
SVCONG	Conglomerate with dominant volcanic clasts	
STILL	Tillite / Greybilly	
SARK	arkose	
SBREC	Sedimentary breccia	
SCHERT	Chert	
SDOLM	Dolomite	
SLMST	Limestone	
SLMST	Limestone	
SBIFOX	Banded Iron Formation - Oxide Facies	
SBIFCB	Banded Iron Formation - Carbonate Facies	
SBIFSX	Banded Iron Formation - Sulphide Facies	
SCOAL	Coal	
SUCLAST	sedimentary undifferentiated clastic	
SESST	Epiclastic sandstone	
VMDST	volcaniclastic mudstone	
VSLST	volcaniclastic siltstone	
VSST	volcaniclastic sandstone	
VQXSST	quartz-crystal-rich volcaniclastic sandstone	
VPSST	Pumecious volcaniclastic sandstone	
VLLSST	Lapilli lithic volcaniclastic sandstone (lapilli size lithics)	

VBLSST	Block lithic volcaniclastic sandstone (block sized lithics)	
VB	volcanic breccia (undifferentiated origin)	
VBB	volcanic block breccia (undifferentiated origin)	
VUND	Undifferentiated volcaniclastic	
LFR	Rhyolite lava	
LFD	Dacite lava	
LIT	Trachyte - typically packed feldspars	
LIA	Andesite lava	
LMB	Basalt lava	
LFUND	Undifferentiated felsic	
LIUND	Undifferentiated intermediate	
LMUND	Undifferentiated mafic	
IFUND	Felsic undifferentiated intrusive	
IIUND	Intrusive intermediate undifferentiated	
IMUND	Mafic intrusive - undifferentiated	
LUUND	Ultramafic lava - undifferentiated	
LUKOMT	Komatiite	
IFGRAD	Granite	
IFGRAD	Granodiorite	
IFADAM	Adamellite	
IFPEG	Pegmatite	
IFGA	Intrusive fine grained granite - aplite or microgranite	
FUB	fuberite - f'd up beyond recognition	
IISY	Syenite	
IID	Diorite (plag dominant, includes porphyry)	
IID1	Weakly mineralised feld-biot porphyry	
IID2	Unmineralised quartz bearing q-feld-biot poyphyry "Dykes"	
IID3	Feldspar crowded porphyry, commonly mineralised; porphyritic diorite/monzodiorite	
IIM	Monzonite (typically k-felds 35-65%, includes porphyry)	
IIT	Tonalite (qtz bearing [>20%] diorite, includes porphyry)	
IIMDI	monzodiorite (plag rich up to 90%, includes porphyry)	
IID4	Feld(w)-biot porpyhyry, commonly xenolith bearing (Dykes, later than IID3)	
IIA	Anorthosite	
IMGB	Gabbro	
IMDL	Dolerite	
IMN	Norite	
IUUND	Ultramafic intrusive undiferentiated	
IUPYRX	Pyroxenite	
IUPERID	Peridotite	
IUDUNT	Dunite	
MUSED	Undifferentiated metasediments	
MSLAT	Slate	
MPHYL	Phyllite	
MSHST	Schist	
MQTZ	Quartzite	
MHORN	Hornfels	
MMBL	Marble	
MGN	Gneiss	
MFGN	Felsic Gneiss	
MIGN	Intermediate gneiss	
MMSHST	Mafic schist	

MMGN	Mafic Gneiss	
MMA	Amphibolite	
MUMSHST	Ultramafic schist	
MUMSERP	Serpentinite	
OIL	Lamprophyre	
OIK	Kimberlite	
OIC	Carbonatite	
OIP	Pepperite (dercribe phases fully)	
OIBX	Intrusive Breccia	
MSSX	Massive Sulphide	
MSSXC	Massive Sulphide (cumulate)	
Mineralisation		
Mineralisation Code	Mineralisation and Alteration Description	
QVN	quartz veining - incl. epithermal style, vuggy, drusy, banded	
QSV	sulphide-bearing quartz vein(/veinlets)	
QCBSV	Sil-Cb Stockwork (mostly stockwork veined & locally Semi-Perv)	
Sil	silica - pervassive and semi-pervassive alteration	
Ser	sericite	
SKARN	Skarn alteration (eg: diopside-Garnet-pyroxene-magnetite)	
SKVN	Skarn dominated veining with calc-silicate, commonly mag selvages	
Amph	Amphibole alteration in skarn	
PX	pyroxene dominated skarn	
Actinolite	Actinolite alteration (in skarn)	
GAR	garnet dominated skarn	
MAG	semi-pervassive to massive magnetite replacement / Skarn	
Geoth	geothite - semi massive to massive	
HEM	Hematisation	
Ch	chlorite	
Cb	Carbonate	
CLY	Clay alteration	
MAGB	banded / veined magnetite replacement	
MAGVN	magnetite veining on fractures	
HORN	Hornfelsing	
CSP	Calc-Silicate/ Skarn (pyroxene dominated - cpx-qtz-cal-dol-wol-ves-gnt-mnt)	
GREISEN	Greisenisation (eg: flourite, beryl, topaz, sericite etc)	
FeQSV	FeO-Quartz stockwork veining, commonly vuggy	
FeSilSP	Semi- Perv Sil-FeO Selvages	
MSSX	massive sulphide	
SMSX	semi-massive sulphide	
DSX	disseminated sulphides	
VSX	Sulphide veining, commonly straight along joints	
OX	Oxidised, including FeO pervassive and semipervassive in matrix/groundmass	
OXMnO	black Manganese oxide, veins, spots	
CALSVN	calc-sil dominated veining with minor skarn vein centres	
QSVB	Broken / brecciated quartz vein zone / faulted	

QOVSX	Oxidised FeO (geothite & limonite) within quartz stockwork, likely after veined sulphide	
OVSX	Oxidised FeO (/geothite & limonite) likely after veined sulphide	
CbVN	Carbonate +/- quartz vein(/s)	
SiSX	Pervasive silica - disseminated sulphide alteration	
CALS	Calc-silicate replacement (commonly veined and semi-perv)	
SILCAL	Pervassive silica/Calc-Silicate alteration	
KSP	Potassic (kfp dominated- bio-ser-act-kfp-qtz-mnt-cpx)	
Phyl	Phyllic (qtz-ser-pyr-fpr-cht-and-corr-kfp)	
Prop	Propylitic (epd-crb-chl-mnt-sme-sil-zeo-ill-alb-adu)	
Arg	Argillic (chy-all-sme-crb-qtz-kao-dic-dia-ill)	
Fuc	Fuchsite	
Vmica	bright green Vanadium? Mica, commonly flecked or pervasive	
HORN	Hornfelsing	
CALS	Calc-silicate replacement (commonly amphibole dominated - trm/act-qtz-cal-dol)	
CSP	Calc-Silicate/ Skarn (pyroxene dominated - cpx-qtz-cal-dol-wol-ves-gnt-mnt)	
SKARN	Skarn alteration (eg: Garnet-diopside)	
KBI	Potassic (biotite dominated - bio-ser-act-kfp-qtz-mnt-cpx)	
KSE	Potassic (sericite dominated - bio-ser-act-kfp-qtz-mnt-cpx)	
ADA	Advanced Argillic (qtz-all-and-cor-pyr-dia-mic)	
GREISEN	Greisenisation (eg: flourite, beryl, topaz, sericite etc)	
SER	Serpentinisation	
Intensity CODE	Intensity DESCRIPTION	
1	very weak	
2	weak	
3	moderate	
4	strong	
5	very strong	
AMOUNT CODE	%	
0.1	trace	
0.5	0.005	
1	0.01	
2	0.02	
3	0.03	
4	0.04	
5	0.05	
6	0.06	
7	0.07	
8	0.08	
9	0.09	
10	0.1	
15	0.15	
20	0.2	
25	0.25	
30	0.3	
40	0.4	

50	0.5	
60	0.6	
70	0.7	
80	0.8	
90	0.9	
100	1	
Mineral Style CODE	Description	
P	Pervasive	
D	Disseminated	
Vn	Vein	
Svn	stringer veined	
Spt	Spots and clots	
Eu	Euhedral crystals	
Sv	Selvedge	
SP	Semi-pervassive	
Gr	Greisen	
Br	Breccia	
Rp	Replacement	
Sk	Skarn	
Bnd	Banded	
Den	Dendritic	
Mineral Type Code	Mineral	
Py	Pyrite	
Aspy	Arsenopyrite	
Sb	Stibnite	
Ga	Galena	
Sp	Sphalerite	
Cpy	Chalcopyrite	
Cv	Covellite	
Cc	Chalcocite	
Bn	Bornite	
Mo	Molybdenite	
Pn	Pentlandite	
Po	Pyrrhotite	
Mc	Marcasite	
Bism	Bismuthinite	
Tetn	Tetrahedrite-Tennantite	
Mag	Magnetite	
He	Hematite	
Wolf	Wolframite	
Cst	Cassiterite	
Cw	Cuprite	
Mal	Malachite	
Cs	Cerrusite	
Au	Visible Au	
Cu	Native Copper	
Ag	Native Silver	
Ad	Adularia	
Al	Alunite	
Dik	Dickite	
Il	Illite	
Ka	Kaolinite	
Pry	Pyrophyllite	
Chd	Chalcedony	
Qz	Quartz	

Zeo	Zeolite	
Sm	Smectite	
Se	Sericite	
Ch	Chlorite	
Ep	Epidote	
Cb	Carbonate	
Ci	Calcite	
Dol	Dolomite	
Rh	Rhodochrosite	
Sd	Siderite	
Mgs	Magnesite	
Ahd	Anhydrite	
Ba	Barite	
En	Enargite	
Pyr	Pyrargite	
Tml	Tourmaline	
Fl	Flourite	
Act	Actinolite	
Tr	Tremolite	
Wo	Wollastinite	
Ves	Vesuvianite	
Fuch	Fuchsite	
Mu	Muscovite	
Bi	Biotite	
Ap	Apatite	
Cd	Cordierite	
Im	Ilmenite	
Rt	Rutile	
Gt	Garnet	
Si	Silicification	
Am	Amphibole	
Hb	Hornblende	
Cpx	Clinopyroxene	
Di	Diopside	
Alb	Albite	
Kf	K-Feldspar	
Ck	Chrysocolla	
Pi	Psilomelane	
Mn	Pyrolusite	
Li	Limonote	
Go	Goethite	
Jr	Jarosite	
FMag	ferromagnesian minerals	
Vmica	green Vanadium Mica	
Colours CODE	Colour	
Br	Brown	
G	Grey	
B	Black	
Y	Yellow	
R	Red	
Gr	Green	
W	White	
O	Orange	
Bl	Blue	
P	Purple	
C	Cream	
Pk	Pink	

Shade		
1	Pale	
2		
3		
4		
5	Dark	
Weathering - Oxidation CODE	Amount	Descriptive Guide
1	Trace	Oxidation only visible in a couple of hand lens area; <1%
2	Weak	~1 to 10% FeO
3	Moderate	~10 to 60% FeO
4	Strong	~60 to 90% FeO
5	Intense	>90% FeO
Weathering - Leaching		
Weathering - Leaching CODE	Amount	Descriptive Guide
1	Trace	Weathering only visible in a couple of hand lens area
2	Occasional	Weathering visible over a number of hand lens areas
3	Weak	Fresh rock only visible in couple of hand lens areas
4	Moderate	No fresh rock visible, but rock still intact
5	Strong	No fresh rock visible, parts of rock broken down to soft material
6	Intense	Nearly all rock broken down to soft material or clay
DH_Survey type	Description	
1	Single shot down hole camera	
2	Measured at collar	
3	Inferred survey for display	
4	Other - see comments	
Verified		
Y	yes	
N	no	
Structure Code	Description	
Face	Facing	
Ft	Fault	
Sh	shear	
Vn	vein	
Fo	Foliation	
Fr	fracture	
Jt	Joint	
Bd	Bedding	
Fold	Fold	
con	contact	
lay	layering	
bnd	banding	
Ln	Lineation	
CATA	Cataclasite	
Slck	Slickensides	
Pu	Puggy seam	
Cl	Cleavage	

Appendix 3: INFORMATIONAL MEMORANDUM On The Economic Mineral potential of Exploration Licence EL 12/2014

INFORMATIONAL MEMORANDUM

On

The Economic Mineral potential of

Exploration Licence
EL 12/2014

For

Edrill Pty Ltd

By

Morris R Hansen
B. Geol, MAIG

Foreword

Function of this Report

Kittitas Holdings Pty Ltd was commissioned by Edrill Pty Ltd to carry out a preliminary assessment of the economic mineral potential of their recently acquired Exploration Licence, EL 12/2014.

This assessment consists of a review of all available historical documents supplied by the client and available to the author via Mineral Resources Tasmania. The author made several visits to site with the client and collected samples for analysis. This document is a preliminary assessment only and the author makes no warranties as to the accuracy or the reliability of the data reviewed.

Datum

Geodetic Datum GDA94 (MGA94, zone 55) has been used for this report unless stated otherwise.

Distribution:

2 x Edrill Pty Ltd

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Abstract

Numerous companies have explored the area constituting the current licence EL12/2014 and surrounds over the last half century. Significant quality ground work has been completed and given strong enough indications for most to decide to drill at least a portion of their respective targets. Although indications of various types of mineralisation were encountered, nothing of significance has been discovered to date. Every explorer has left the area without completely determining whether economic mineralisation may or may not exist.

It is the opinion of the author that the primary reason for this is that only a small portion of the potential mineral bearing sediments are exposed. The majority of the prospective beds are covered by tertiary basalt flows. Historically, this has meant little to no exposure to the potential mineral bearing rocks and with the technology of the day, the basalts would have masked the effects of geochemical and geophysical methods used to locate deep seated deposits.

The most promising work which would suggest that improved technology may now be able to target long suspected mineral deposits below the basalt cap was that carried out by Bass metals in 2008 – 2009 with their VTEM survey which supplied numerous targets, many of which correspond to earlier work by others and some which are newly defined.

Magnetite, as an alteration sequence in the sediments in close proximately to the granite intrusions is evident on the tenement, as it is throughout the area, indicating potential for a Kara style operation provided further exploration proves up the tonnages. Given that most of the prospective area is overlain by basalt and as such is not exposed and has not been systematically explored for magnetite, the potential is good.

Even more importantly is the idea that previous explorers of international standard recognised the potential of the area to host significant tin-tungsten and VHMS base metal deposits. As such, they spent many years systematically exploring the area, concentrating most of their interest and work on an approximately 8km long strike length of exposure between the granite and the basalt cap, which lies entirely within EL12/2014. Investigation of the potential for mineralisation below the basalt was touched on by most companies but little work was completed. Given the many variables including technology, metal prices, company priorities and more which influence exploration programs at any given time, the potential to discover significant mineralisation below the basalt cap remains.

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Kittitas Holdings Pty Ltd
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1 INTRODUCTION

1.1 Purpose of This Document

This document is provided as a summary of available information relating to Exploration Licence EL12/2014 held by Edrill Pty Ltd, at the client's request.

1.2 Exploration Licence Location and Operations

1.2.1 Mineral Exploration Area

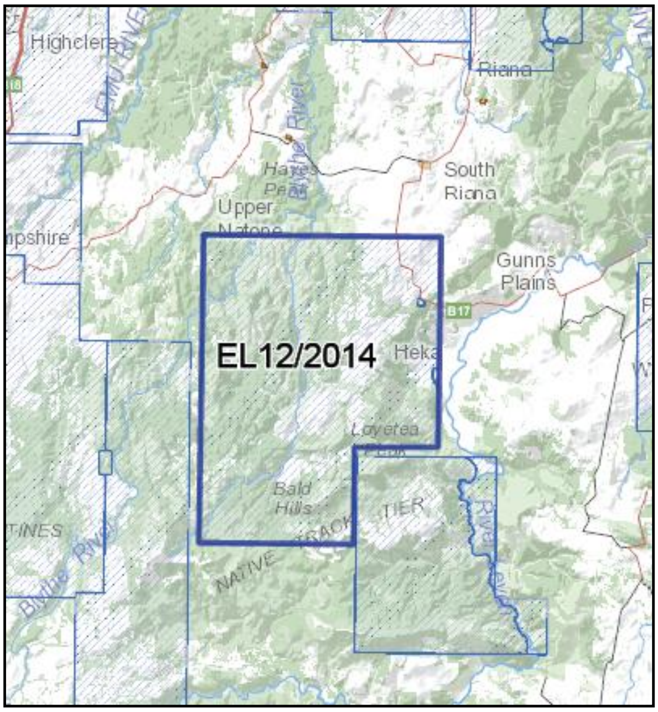
Exploration Licence 12/2014 (EL12/2014) covers an area of 83 square kilometres and is located approximately 43km due south of Burnie in North Western Tasmania (Figure 1).

1.2.2 Site Location

Access to EL 12/2014 is via the Bass Highway, southeast to Penguin and then south on sealed roads and well formed gravel roads to the tenement area. Access throughout the tenement is good with forestry roads covering much of the area.

The Licence area is dominated by forest, much of which has been harvested and replanted over time.

Figure 1: Location of EL 12/2014



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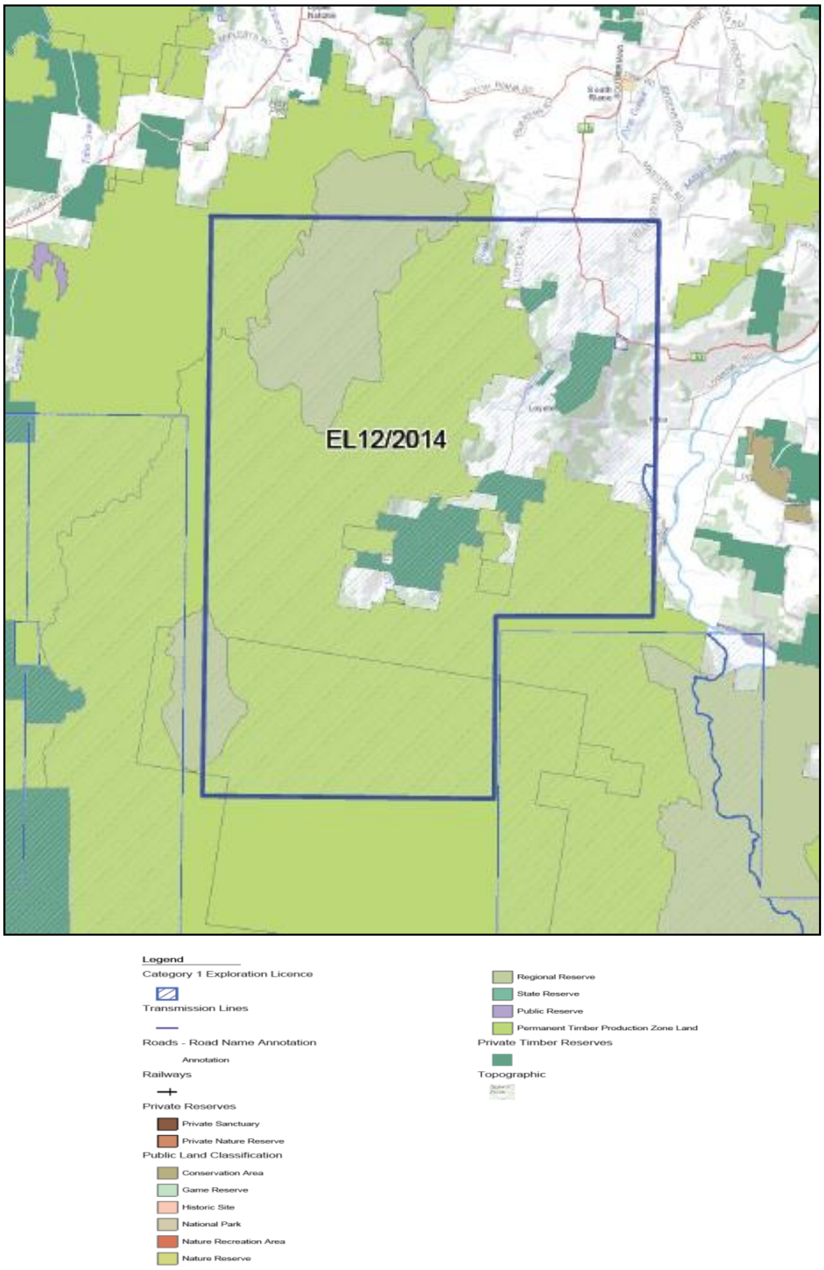
1.2.3 Exploration Licence Tenure

The tenement, EL 12/2014, was granted to Edrill Pty Ltd on the 6 August 2014 for a period of five years and applies to all Category 1 minerals. The licence area covers 83 square kilometres and land tenure areas within the licence include:

- Permanent Timber Production Zone Land (majority);
- Private Land (Northeast section);
- Zones of Informal Reserve (Forestry Operations) – Private Land;
- Regional Reserve and Managed Forest Communities in the North-western corner

The current land tenure in and around EL 12/2014 is provided in Figure 2.

Figure 2: Land tenure for EL12/2014



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2 SUMMARY OF PREVIOUS WORK

2.1 Previous Exploration

Exploration in the Loyetea area has been underway since the late 1800's focused primarily on Iron and Copper until the mid 1900's when exploration companies began applying modern techniques to exploration in their efforts to locate a multitude of potential mineral deposits of economic significance.

Since the late 1960's companies have been targeting base metals either as VHMS style deposits, sedimentary hosted deposits or granite skarn related deposits for various commodities including copper, lead, zinc, tin, tungsten and iron.

Significant work was carried out in the 1970's by major exploration companies such as Shell Minerals and Comalco. These companies have carried out and completed most of the basic ground work and followed up some of this work with drilling. They all left the area without testing the extent of all located anomalies. It is worth noting that not one of these companies had any interest in the magnetite occurrences at the time.

2.1.1 Comalco Limited

Comalco Limited acquired the Exploration Licence EL8/77 which was granted on the 5th August, 1977 with extensions being granted both to the north and south of the original EL. The EL was applied for as part of Comalco's search for a source of fluorite (Weste, 1979). Comalco considered the area prospective for fluorite-tin and/or tungsten skarns. Exploration over a period led to the discovery of traces of magnetite skarn anomalous in tin and tungsten in the Redwater creek area and further work led to the decision to complete three diamond drill holes in the area. These holes were Red 1, Red 2 and Red 3. Drill holes Red 1 and Red 2 intersected some magnetite skarn but Red 3 failed to intersect any magnetite skarn. No economic concentrations of tin or tungsten were found in the drill holes and the project was farmed out to a joint venture with Shell Minerals for further exploration as Comalco's interest was in flourite and the program had not been successful in locating a flourite deposit.

2.1.2 Shell Minerals

In January 1980 Shell entered into a Joint Venture with Comalco on the tenement and became the manager of the venture. Shell continued with Comalco's earlier work and focused on the potential for tin, tungsten and other base metals. Shell completed several focused geophysical surveys over the areas of interest and determined to complete another two diamond drill holes in the Redwater Creek prospect.

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Shell concluded that the priority target area extended approximately 8kms in length from Laurel Creek in the south to Loyetea in the north (Banwell, 1981).

Shell completed two diamond drill holes, RD4 which failed to locate any magnetite skarn and RD5 which was successful in locating magnetite skarn, but not of sufficient quantity to explain the magnetic target and as such Shell concluded that it was possible a larger body remained undiscovered. However, as the skarn zone did not indicate economic amounts of tin or tungsten, work in the area was discontinued.

2.1.3 Jervois Mining

After several years work in the tenement area Jervois Mining decided to complete four reverse circulation holes in early 1997. Two of the holes were located near the previously drilled Comalco and Shell diamond holes and two more further to the southwest near Pilbeam road. The four holes were designed to be completed at a depth of 120m but only RW1 was able to reach that depth. Adverse drilling conditions, in particular high water flows prevented the other holes from reaching their planned depth (Douglas McKenna & Partners Pty Ltd, 1997).

Jervois Mining were exploring for skarn related base metal and tin tungsten deposits. RW1 and RW2 both located pyrite and pyrrhotite in the limestone with increasing sulphides at the bottom of both holes. Drill holes RW1, RW2 and RW4 all had indications of scheelite at end of hole.

Jervois Mining concluded that the drilling had not ruled out a deeper seated target that could be reached with a diamond drill program.

2.1.4 Bass Metals

Bass Metals operated on EL 52/2004 as managers of a joint venture with Geoinformatics from 2005 until 2009. They were targeting Rosebery-Hellyer VHMS style mineralisation (Murphy, Bates, 2009). Historical data review and field work completed over the period culminated in the completion of an airborne VTEM survey. The survey identified numerous anomalies which were ranked in order of priority. Field reconnaissance was initiated but it was soon found that observations on the ground were rendered ineffective by thick vegetation and lack of outcrop predominately due to the basalt cover in the area.

As VTEM target LOY#2 coincided with previous exploration efforts by prior explorers and ranked number two on the priority list, attention was focused on this anomaly. Bass's independent consultant geophysicist indicated that the conductor here was conductive through to its latest time recorded and as such should represent a quality target. The target is assumed to be sub-planar with dimensions of 200m x 200m and approximately 200-250m deep (Murphy, Bates, 2009). A diamond drill hole was planned to test the target but was never drilled. Bass reviewed the program, decided the target did not meet their current exploration objectives and relinquished the tenement.

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3. CURRENT EXPLORATION, 2014 – 2015

3.1 Loyetea Project

As Exploration Licence EL 12/2014 has only just been granted (6th August, 2014), work to date consists of an initial literature review, numerous visits to site and the collection of a handful of grab samples. Three samples have been submitted to ALS laboratories in Burnie for analysis. Results for the first two samples are included in Table 1. The third sample is currently at the lab for testing. The samples were run for a sweep of minerals with a focus on iron and a separate assay was run for gold.

4 Discussion

Review of historical literature has revealed a considerable amount of quality work has been completed over the area which includes EL 12/2014. For the most part the various companies were exploring for either tin and tungsten or base metal deposits. No major deposit has yet been found, however, basalt cover has hindered prior exploration. Technological advances in sub-surface detection such as the VTEM survey completed by Bass Metals, as well as indications by various previous explorers that they were unable to properly test their respective targets leaves little doubt that the area requires further exploration.

The potential still exists for magnetite iron deposits and potentially tin-tungsten skarn deposits or VHMS style mineralisation at depth below the basalt cap. A priority would be to collate previous data into a single database and then the completion of the planned drill hole by Bass Metals and possibly deeper holes at Redwater Creek where holes were abandoned potentially close to mineralisation due to drilling conditions. Careful planning would be required but it would be possible to further test the two areas with less than a 1000m of drilling.

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Hand grab samples collected by client at outcrops on tenement

Appendix 1: Grab sample analysis

	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
SAMPLE	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
DESCRIPTION	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Small Sample	0.05	1.04	2.6	<0.2	<10	20	0.36	1.14	0.01	<0.01	119	0.6	1
% equivalent			0.00026			0.002		0.00014			0.0119		0.0001

	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS
SAMPLE	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn
DESCRIPTION	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
Small Sample	1.31	5.6	17.65	6.26	0.17	1.05	0.06	0.442	0.47	2.4	1.4	0.01	
% equivalent	0.000131	0.00056		0.000626		0.000105				0.00024	0.00014		0

	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn
	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	0.01	3.97	1.1	30	16.4	103.5	0.002	0.01	0.82	1.1	1.4	18.3
		0.000397	0.00011	0.003	0.00164	0.01035				0.00011	0.00014	0.00183

	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41
	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.7	0.03	0.02	80.5	0.006	0.67	3.08	1	132.5	55.1	66	23.4
				0.00805			0.000308	0.0001	0.01325	0.00551	0.0066	0.00234

	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n
SAMPLE	Al2O3	As	Ba	CaO	Cl	Co	Cr2O3	Cu	Fe	K2O	MgO	Mn	Na2O
DESCRIPTION	%	%	%	%	%	%	%	%	%	%	%	%	%
Large Sample	1.26	0.007	<0.001	<0.01	0.003	0.009	0.006	<0.001	67.06	0.003	0.26	0.495	0.016

	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-XRF21n	ME-GR
SAMPLE	Ni	P	Pb	S	SiO2	Sn	Sr	TiO2	V	Zn	Zr	Total	LOI
DESCRIPTION	%	%	%	%	%	%	%	%	%	%	%	%	%
Large Sample	0.004	0.008	0.004	0.006	0.73	0.021	<0.001	0.21	0.003	0.051	0.002	99.99	

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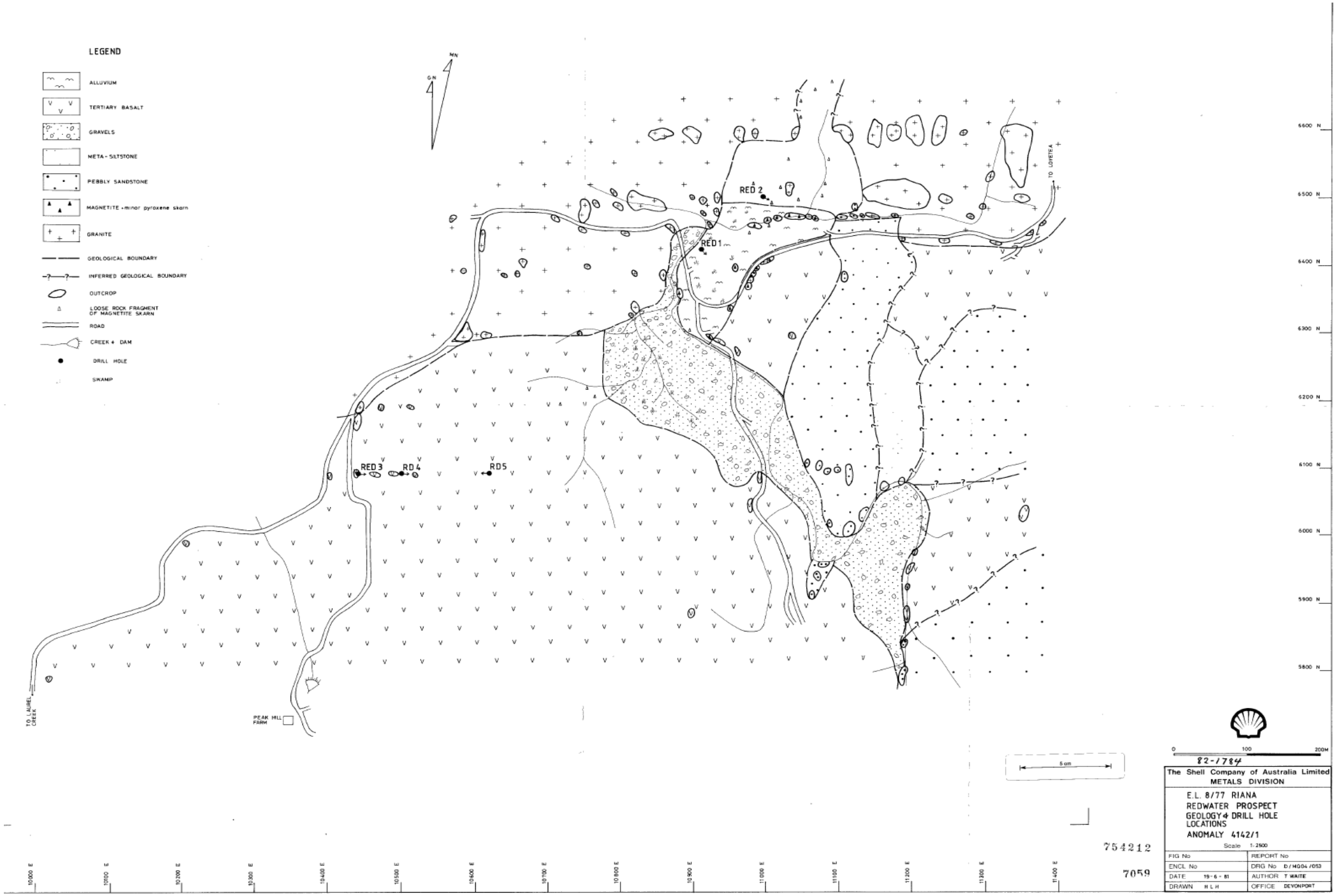

Appendix 2 – Geological plan of Redwater prospect giving drill hole locations
Shell Company of Australia – Metals Division

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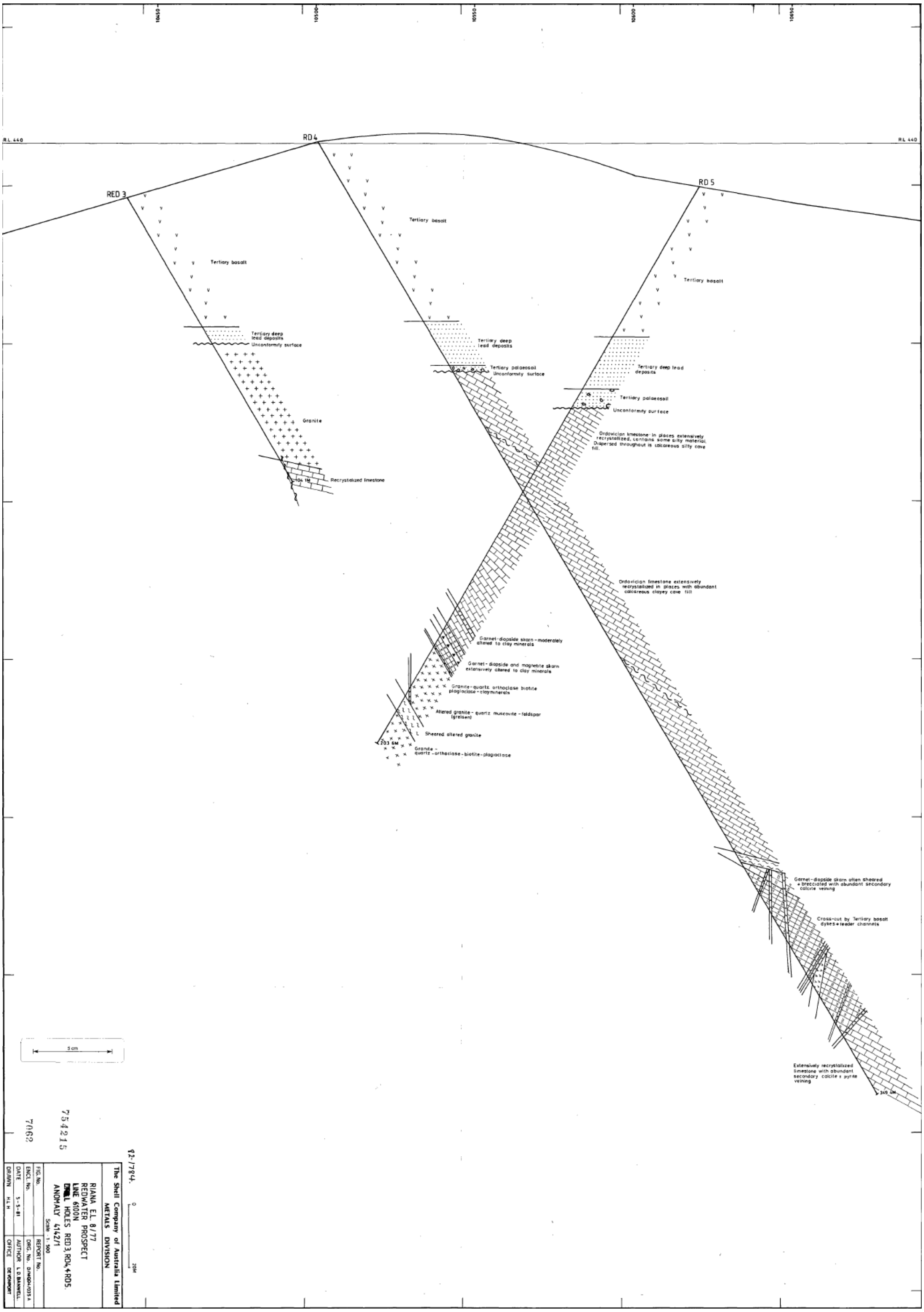

Appendix 3 – Section for diamond drill holes Red 3, RD4 & RD5
Shell Company of Australia – Metals Division

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